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ABSTRACT

The Oklahoma exemplary program located at Tulsa was designed to provide occupational orientation and vocational training for disadvantaged and previously unserved students from Grade 5 through 12 in a comprehensive urban school system. To evaluate the program, data were collected about the: (1) contest or goals and objectives of the program in relation to its setting, (2) inputs, or resources available and used, (3) procedures and techniques used to implement the program, and (4) outcomes of the program. For comparison purposes, control students were selected at the eighth, ninth, and tenth grade levels. Findings indicate that at the fifth and sixth grade levels the program successfully acquainted students with a wide range of occupations. At the tenth grade level the cluster skill training had a positive influence on the attitudes of the girls toward school, but there were no significant differences between the attitudes of the two groups of boys. Specific recommendations are that the program continue funding for another year and that coordination of the programs be improved at all levels. (Author/GEB)

ED055239

INTERIM EVALUATION REPORT

Project No. 0-361-0123
Contract No. OEC-0-71-0530(361)

AN EVALUATION OF OKLAHOMA'S EXEMPLARY VOCATIONAL EDUCATION AND OCCUPATIONAL ORIENTATION PROGRAM, TULSA PUBLIC SCHOOLS

Exemplary Project in Vocational Education
Conducted Under
Part D of Public Law 90-576

Robert E. Norton
Lavern Penn
William W. Stevenson

Research Coordinating Unit
Oklahoma State University
Stillwater, Oklahoma 74074

August 15, 1971

VT014098

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EDUCATION & WELFARE
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The project reported herein was performed pursuant to a contract with the Bureau of Adult, Vocational, and Technical Education, Office of Education, U.S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

Robert E. Norton

Lavern Penn

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SUMMARY

Title: Interim Evaluation of Oklahoma's Exemplary Vocational Education and Occupational Orientation Program, Tulsa Public Schools

Investigators: Robert E. Norton and Lavern Penn

Contracting Agency: Research Coordinating Unit
Oklahoma State University
Stillwater, Oklahoma 74074

Time Period: September 1, 1970 - June 30, 1971

Purpose:

The purpose of this project was to evaluate the Oklahoma exemplary program located at Tulsa in terms of its eight original program objectives. The program was designed to provide a vertically integrated sequence of occupational orientation and vocational training for disadvantaged and previously unserved students from grades 5 through 12 in a comprehensive urban school system.

Procedures:

Both subjective and objective data was collected about the: (a) context or goals and objectives of program in relation to its setting , (b) inputs, or resources available and used, (c) procedures and techniques used to implement the program, and (d) outcomes of the program. Several instruments were selected and developed to provide specific data about one or more of the program objectives. For comparison purposes, control students were selected at the 8th, 9th, and 10th grade levels. Two on-site visits were made by members of the evaluation team to interview personnel involved and to administer the various evaluation instruments to students and teachers. The data was analyzed and is summarized in terms of findings relative to each major objective.

Findings:

At the 5th and 6th grade levels, the program appears to have been successful in acquainting students with a wide range of occupations, and fairly successful in acquainting the students with the varied educational offerings of the school. The 7th grade program was basically a regular practical arts program, while the 8th and 9th grade students were given two hours per day of career exploration.

It was concluded that in spite of this exploration training, many of these students, like students in the control group, were lacking in information sufficient for making reasonably consistent occupational choices.

At the 10th grade level cluster skill training was provided for the boys in construction occupations and for the girls in home and community service occupations. The data collected indicated that a higher percentage of the exemplary girls than the control girls rated their level of achievement in each of the various skill areas as excellent. Few major differences were found between the ratings of the exemplary boys and the control boys. In terms of attitudes toward school, it was found that the exemplary program had a statistically significant positive influence on the girls enrolled in the program as compared to similar girls not enrolled. There were no statistically significant differences between the attitudes of the two groups of boys.

Three cooperative vocational education programs were being offered at the 11th and 12th grade levels in a manner similar to what had been offered prior to the exemplary program. There appeared to be only a minimal amount of coordination of these programs with the other grade levels.

The objective of providing intensive skill training to those non-vocational students about to leave high school for a job was not implemented. Supplementary training programs were being offered during the summer although not in the high school most involved with the exemplary program. One alternative method for using the area vocational center was implemented in terms of a voluntary summer career orientation and exploration program.

Recommendations:

Fourteen recommendations were made based on the findings of the evaluation effort. The major recommendations, although all are believed very important, were as follows: (1) Continue funding for another year, (2) Expand the program with modification to other schools and other students, (3) Employ the full complement of staff as originally specified, (4) Modify program objectives to make them more realistic and measurable, (5) Improve coordination and integration of the program at all levels, (6) Establish advisory committees at each level, (7) Form special interest clubs for grades 7-10, and (8) Continue inservice training meetings for purposes of coordination and curriculum development.

SECTION I

INTRODUCTION

THE PROBLEM

In the fall of 1970, Oklahoma and the Tulsa Public Schools initiated an "Exemplary Comprehensive Occupational Orientation and Vocational Education Program." As most professional educators have begun to recognize, any new program must be carefully evaluated to determine its merit or lack thereof. Good evaluative efforts demand planning and the selection of techniques and procedures which will provide data that can be objectively analyzed in terms of the program's previously established objectives.

Specifically, the problem in this case was to design the best evaluative approach possible, in an ex post facto situation, to evaluate the Oklahoma exemplary project in terms of its eight general program objectives.

The contract for the evaluation of the first phase of this exemplary project was awarded to the Oklahoma Research Coordinating Unit at Oklahoma State University, Stillwater, with Dr. William W. Stevenson of Oklahoma State University serving as Program Director, and Dr. Robert E. Norton and Dr. Lavern Penn of the University of Arkansas at Fayetteville, serving as consultants in the role of Principal Investigator and Associate Investigator, respectively. Dr. Stevenson and Dr. Norton are both vocational educators with considerable evaluation experience, and Dr. Penn is an experience vocational counselor. The evaluation contract covered the period May 1, 1971 through August 15, 1971.

GENERAL SETTING AND PURPOSE

The major objective of the Oklahoma Exemplary Project as stated in the funded Proposal Number 0-361-0123 was

> to develop an exemplary "total" school approach to meeting vocational education needs for disadvantaged and other youth who have not previously received benefit from vocational training. The program will provide elementary school vocational orientation, junior high school vocational orientation and exploration, tenth grade cluster skill training, eleventh and twelfth grade cooperative training for disadvantaged, senior intensive job training, and dropout intensive job training.

Originally two urban school districts were to be selected for implementing the program. Due to delayed and reduced funding over what had been requested, it was decided to concentrate all the effort in the Tulsa Public School System, Independent District #1. Although the Tulsa Public Schools were designated in early August (Killian letter of August 5, 1970) as the schools for implementation of the state exemplary program, notification of actual funding was delayed until after school had started. The Oklahoma State Department of Vocational and Technical Education was notified by the U.S. Office of Education via telegram on September 17, 1970, that their exemplary proposal had been approved in the amount of $107,252 for fiscal 1971. The State Department in turn notified Dr. Gordon Cawelti, Superintendent of Tulsa Public Schools on October 1, 1970, that this amount would be available to Tulsa in keeping with the terms of the exemplary proposal.

The Tulsa Public School system assigned administrative responsibility of the project to Dr. Bruce Howell, Assistant Superintendent of Instruction and Mr. Morris J. Ruley, Director of Vocational and Technical Education. Mr. Ruley and his staff selected Central High School from among the nine public high schools which comprise the Tulsa system as the school having the greatest need for this type of program. Central High as the name implies, is located in central downtown Tulsa, an area which is highly populated and well represented by minority races and disadvantaged students.

In addition to the high school, the three junior highs which feed into Central (Horace Mann, Lowell, and Roosevelt) and the eight elementary schools (Pershing, Irving, Riverview, Johnson, Longfellow, Jefferson, Lowell and Lincoln) which prepare students for the three junior highs were selected to participate. This arrangement provided one comprehensive unit within the Tulsa System in which the exemplary program could be initiated and hopefully cumulative effects of the program on students at the various grade levels observed.

The purpose of the program as outlined within the proposal was to "demonstrate a vertically integrated scope and sequence of vocational training for disadvantaged and previously unserved students from grades 5 through 12 in a comprehensive urban school system." The chart on the following page presents an illustrated conceptualization of the overall exemplary project.

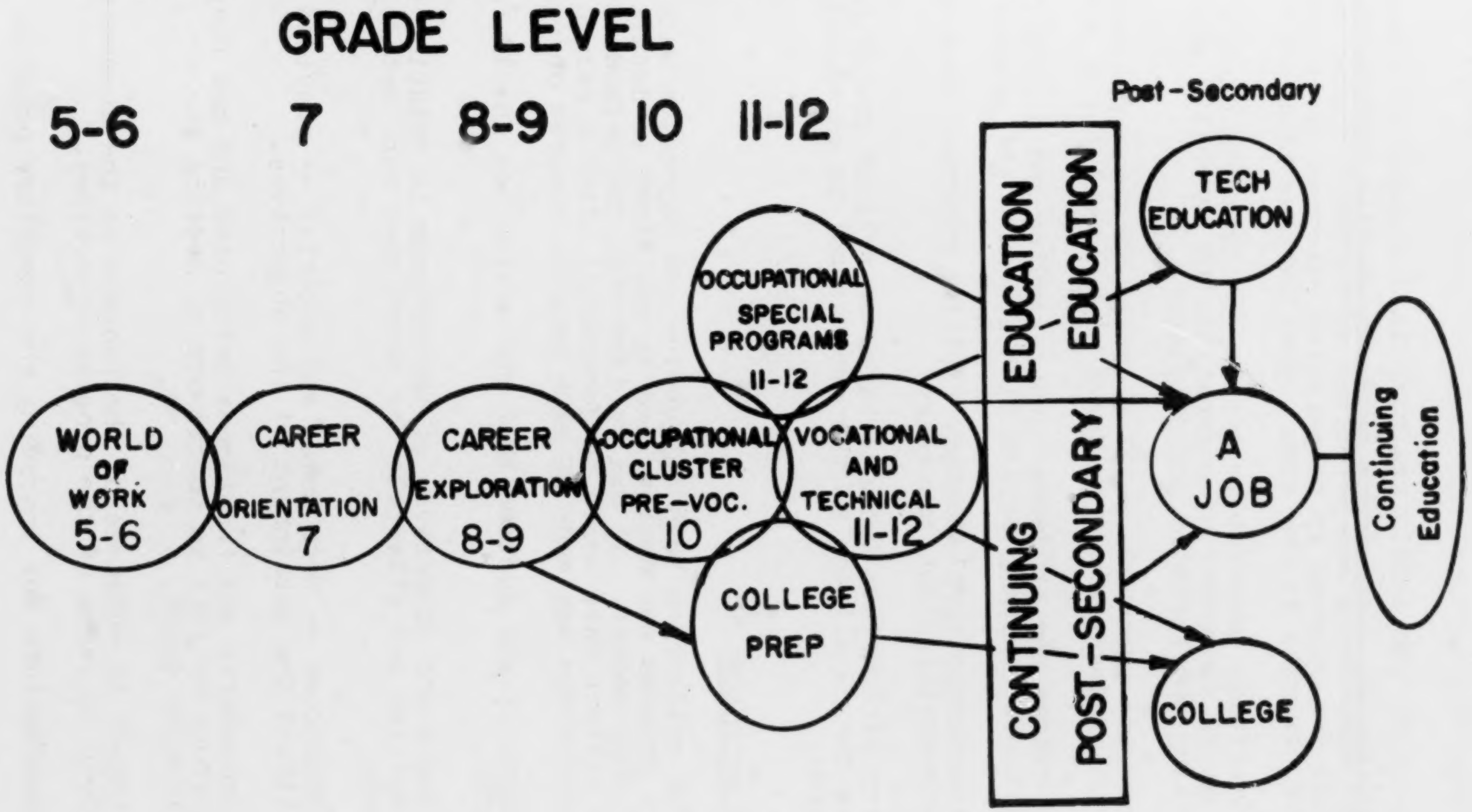
GENERAL PROGRAM OBJECTIVES

General objectives which are perhaps better defined as broad goals of the exemplary project were as follows:

1. To establish methods whereby elementary school students may become acquainted with the wide range of occupations and the varied educational offerings of the school.

2. To combine our latest findings relative to vocational guidance into a counseling and exploratory work experience program for junior high school students which will

Career Development Continuum


GRADE LEVEL
5-6
7
8-9
10
11-12
Post-Secondary
WORLD OF WORK 5-6
CAREER ORIENTATION 7
CAREER EXPLORATION 8-9
OCCUPATIONAL CLUSTER PRE-VOC. 10
OCCUPATIONAL SPECIAL PROGRAMS 11-12
VOCATIONAL AND TECHNICAL 11-12
COLLEGE PREP
EDUCATION
EDUCATION
CONTINUING
POST-SECONDARY
TECH EDUCATION
A JOB
COLLEGE
Continuing Education

Educational Programs to Provide an Employable Citizen

TULSA PUBLIC SCHOOLS
Division of Instruction
Department of Vocational and Technical Education
In Cooperation with
Oklahoma Department of Vocational and Technical Education

provide them with the necessary skills to make a reasonable occupational and training choice.

3. To provide the skills training in a cluster of occupations at the tenth grade level which will insure entry level competency and potential advancement characteristics for success in cooperative programs or in day trade programs in the area school or home high school.

4. To institute cooperative on-the-job training experiences in a cluster of occupations to intensify skill training and increase job readiness.

5. To provide intensive skill training to those non-vocational students about to leave high school for a job.

6. To increase the students' understanding and desire for additional training beyond high school where appropriate.

7. To inaugurate supplementary training programs such as summer training for job entry.

8. To try alternative methods based on related research for using the facilities of the area school in an exemplary program.

GENERAL EVALUATION APPROACH

A plan for collecting both subjective and objective data about the exemplary program was devised and is explained in detail in a later section of this report. It was decided that the methods and techniques used to collect data would be determined after a careful analysis and interpretation was made of each general program objective.

In addition, it was decided that the evaluation should focus on five major points:

1. The goals and objectives of the program in relation to the setting and clientele for which they were established.
2. The resources -- both human and material -- provided to facilitate the attainment of the objectives.
3. The procedures and techniques being used and how they contribute or fail to contribute to meeting the objectives set forth.
4. The impact or outcomes of the program on the students involved in terms of the program objectives.
5. Recommendations for improving the exemplary program.

SECTION II

THE PROGRAM CONTEXT

THE LOCALE

The Oklahoma exemplary project is located in eight elementary, three junior high, and one senior high school in Tulsa's downtown business district.

Tulsa is a prosperous industrialized city of 261,685 persons. The second largest city in Oklahoma, it lies on the Arkansas River about 120 miles northeast of Oklahoma City in the center of oil and gas producing areas.

Known as the "oil capital of the world", Tulsa is the control center for one-forth of the nation's petroleum industry, which includes producers, manufacturers and distributors. The manufacturing center of Oklahoma, Tulsa has more than 600 industries. The city provides a market for the nearby rich agricultural areas and for beef cattle.

The project was conducted in spacious buildings, but in the somewhat congested area of downtown Tulsa. (see map on next page) Several businesses in the area of the exemplary project schools have closed during the past two years because of vandalism. The population of the schools is made up of both black and white children from the lower socio-economic levels which are in evidence in that area of Tulsa. The downtown area is highly populated and well represented by minority races. A large proportion of these inner-city students, as contrasted with the more suburban school students are disadvantaged in one or more ways. Many of the families are receiving welfare assistance.

THE SCHOOL SYSTEM

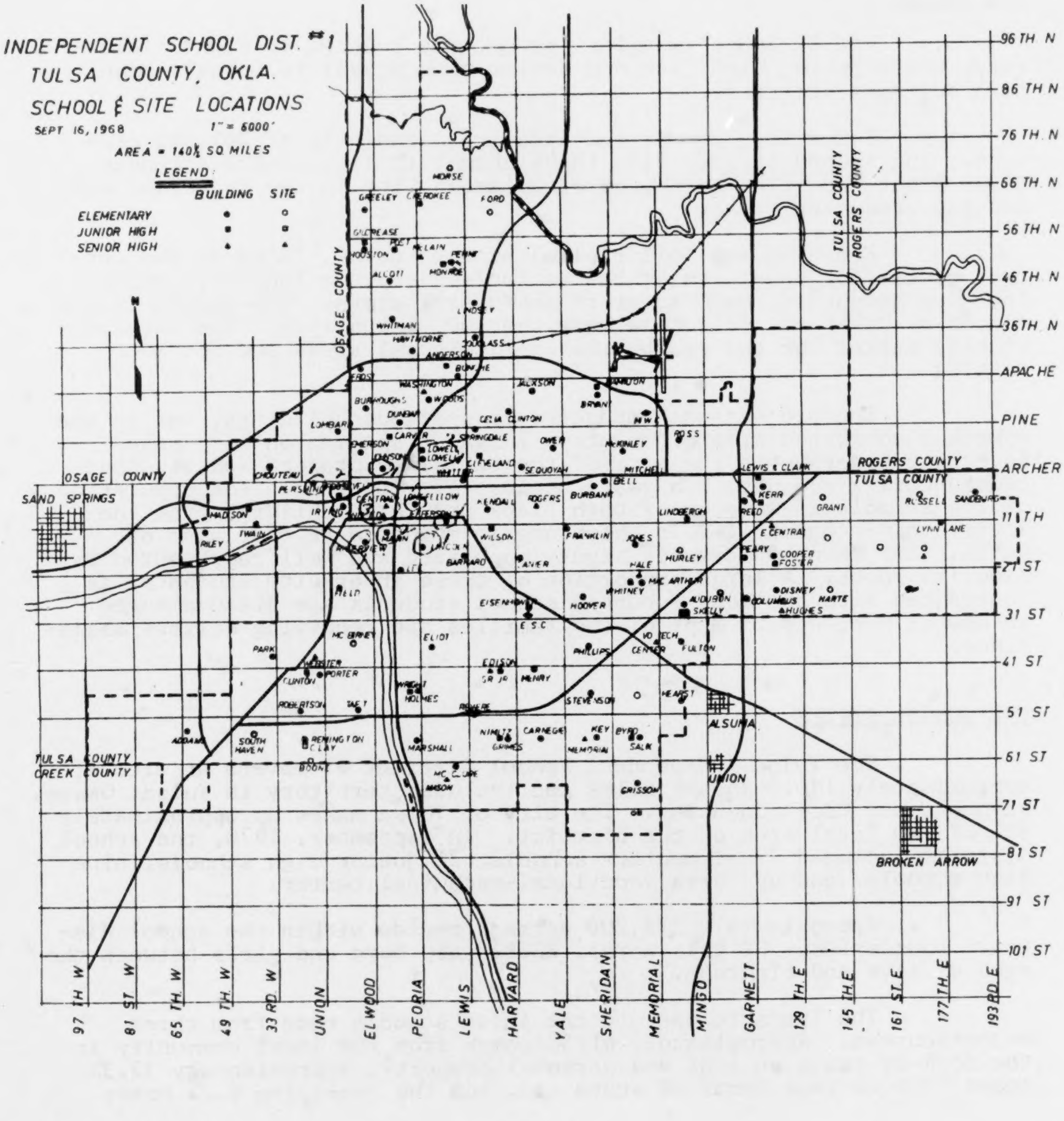
The Tulsa Independent School District #1 covers an area of approximately 140.5 square miles and includes territory in Tulsa, Osage, Wagoner, and Creek Counties. The city of Tulsa makes up approximately 82% of the total area of the district. In September, 1970, the school district included 77 elementary schools, 21 junior high schools, nine high schools, and one area vocational-technical center.

Approximately 329,200 persons reside within the school district boundaries. Of this total, 82,828 are boys and girls between the ages of five and eighteen.

The funds to operate the Tulsa schools come from three major sources. Approximately 61.5% comes from the local community in the form of taxes on real and personal property, approximately 32.3% comes from various forms of state aid, and the remaining 6.2% comes

TULSA SCHOOL DISTRICT MAP

LOCATION OF TWELVE EXEMPLARY SCHOOLS DESIGNATED


INDEPENDENT SCHOOL DIST. #1
TULSA COUNTY, OKLA.
SCHOOL & SITE LOCATIONS
SEPT 16, 1968
1" = 6000'
AREA = 140½ SQ. MILES
LEGEND
BUILDING SITE
ELEMENTARY ● ○
JUNIOR HIGH ■ □
SENIOR HIGH ▲ △
N
OSAGE COUNTY
SAND SPRINGS
TULSA COUNTY
CREEK COUNTY
ROGERS COUNTY
BROKEN ARROW
ALSUMA
UNION
96 TH N
86 TH N
76 TH N
66 TH N
56 TH N
46 TH N
36TH N
APACHE
PINE
ARCHER
11 TH
21 ST
31 ST
41 ST
51 ST
61 ST
71 ST
81 ST
91 ST
101 ST
97 TH W
81 ST W
65 TH W
49 TH W
33 RD W
UNION
ELWOOD
PEORIA
LEWIS
HARVARD
YALE
SHERIDAN
MEMORIAL
MINGO
GARNETT
129 TH E
145 TH E
161 ST E
177 TH E
193 RD E
HORSE
GREELEY
CHEROKEE
FORD
GILCREASE
HOUSTON
POE
MCLAIN
PERRY
MONROE
ALCOTT
LINDSEY
WHITMAN
HAWTHORNE
DOUGLASS
ANDERSON
FROST
BURNHE
WASHINGTON
BURROUGHS
WOODS
JACKSON
BRYANT
MARION
DUNBAR
CELIA CLINTON
LOMBARD
CARVER
SPRINGDALE
EMERSON
LOWELL
OWEN
MC KINLEY
ROSS
CHOUTEAU
CLEVELAND
SEQUOYAH
WEBSTER
MITCHELL
LEWIS & CLARK
PERSHING
LONGFELLOW
BELL
KERR
CENTRAL
KENDALL
ROGERS
BURBANK
MADISON
IRVING
JEFFERSON
REED
GRANT
RUSSELL
SANDBURG
LINDBERGH
TWAIN
WILSON
FRANKLIN
JONES
E CENTRAL
LYNN LANE
RILEY
LEE
LINCOLN
BARNARD
PEARY
HALE
HURLEY
COOPER
FOSTER
MAC ARTHUR
FIELD
EISENHOWER
WHITNEY
AUDUBON
DISNEY
COLUMBUS
HARTE
HOOVER
SKELLY
HUGHES
E.S.C.
MC BIRNEY
ELIOT
PHILLIPS
VO TECH CENTER
FULTON
PARK
WEBSTER
PORTER
EDISON
SR JR
MC HENRY
CLINTON
WRIGHT
HOLMES
STEVENSON
HEARST
ROBERTSON
TAFT
NIMITZ
CARNEGIE
KEY
BYRD
GRIMES
MEMORIAL
SALK
ADDAMS
SOUTH HAVEN
REMINGTON
CLAY
BOONE
MARSHALL
MC CLURE
MASON
GRISSOM

primarily from Federal tax sources. In 1969-70, the net cost per pupil in average daily attendance in the regular day-school program, excluding capital outlay, was $548.37.

A comprehensive basic curriculum is provided in grades K-6, with pupils being "grouped on the basis of recognized instructional needs". At the junior high and high school levels the instructional program consists of comprehensive offerings in the three traditional areas of college preparatory, general education, and vocational-technical. At the secondary level all subjects are departmentalized with each subject area being taught by teachers specializing in that area. Pupils at this level, at least for the required general education subjects, are grouped into three levels based on ability, previous achievement, and teacher judgment. All of the Tulsa schools are accredited by the State Department of Education and the nine senior schools are also accredited by the North Central Association of Colleges and Secondary Schools.

According to a follow-up study of the Class of 1967, 56% of the Tulsa high school graduates enrolled in colleges or universities, and an additional 6.9% attended other types of educational institutions. It is estimated that approximatey 22% of the graduates go to work immediately following graduation. Of the 11th and 12th grade students enrolled during the 1970-71 school year, approximately 15.9% were enrolled in some type of occupational training.

NEED AND BACKGROUND

Public schools from kindergarten to graduate school have traditionally emphasized the lock-step, college preparatory route as the only acceptable approach to education. This overemphasis inevitably attracted many students who either do not have the desire or the ability to succeed with this approach. Realizing that only about 20% of entering first graders would ever complete a baccalaureate degree and that most jobs now require individuals with some type of formal training, Tulsa personnel decided that programs must be designed which will open other avenues to students. Another approach to education was needed which was just as fulfilling, just as promising, just as respectable as the college preparatory approach. They felt students must be afforded the experiences needed to see that there is another choice and equipped to make a reasonable choice of occupation when entering vocational education.

In all too many instances, students have in the past seen little relationship between their schooling and the world they knew lay ahead -- even when a strong relationship actually existed. Tulsa recognized a definite need for a program which would form the student's first introduction to training at the elementary level and encourage him to relate what he is learning to the work world of his future. The academic or general education programs also needed changing to more realistically reflect the world outside the classroom.

Specifically, there existed a definite need to provide a comprehensive integrated program of orientation, exploration, and cluster skill training coupled with vocational guidance and counseling. This need was especially acute for students who were disadvantaged or handicapped and who exhibited inadequate motivation as indicated by low achievement, high absenteeism, and other potential school leaving symptoms.

Prior to initiating the exemplary program in October of 1970, there was not a similar comprehensive program of orientation to the world of work and job preparation program in operation. There were, however, the traditional practical arts programs at the junior high level and the vocational laboratory and cooperative job preparation programs at the high school level. It was obvious, however, that these programs were not meeting the needs of the majority of the students who would eventually enter employment without a four year college degree. Too many students had been leaving the Tulsa schools without benefit of either marketable skills and/or preparation for further education.

There was a need to pull together the best procedures that could either be found in research reports or developed locally to provide a concentrated effort to break the college or bust syndrome which had been severely limiting the preparation of most youth for employment.

The Tulsa exemplary program began operating in October of 1970 based on the assumption that children could be prepared to more effectively choose an occupation and could be more properly trained for that occupation through a program which moved logically through the decision-making and learning phases from elementary through high school to on-the-job performance. It was anticipated that an elementary school through high school approach with specific goals and assignments for each phase would allow the stated objectives to be met and the system to be checked segment by segment to determine the most appropriate sequence of experiences.

Existing programs at the junior high level and senior high level would need to be modified and a completely new program at the fifth and sixth grade levels initiated. The uniqueness of the program was the need and desirability of integrating within one school system what had been a rather spotty approach to vocational orientation, exploration, training and job placement.

No special problems were encountered in gaining acceptance of the program by parents and the community.

SECTION III

THE EXEMPLARY PROGRAM

SCOPE OF PROGRAM

The major elements of the exemplary program as outlined in an administrative announcement dated October 20, 1970 and released by Dr. Bruce Howell, Assistant Superintendent for Instruction, were as follows:

a. General career orientation would be provided in the fifth and sixth grades of the elementary schools.

b. Career orientation and exploration would be provided in the junior high schools.

c. Cluster skill training would be provided at the tenth grade level.

d. Special vocational and technical cooperative training would be provided for disadvantaged students at the eleventh and twelfth grade levels.

e. Intensive skill training would be provided for seniors and early school leavers.

The original intent of the program was to make education at grade levels 5-12 more career oriented for the students involved, so as to help them better understand how their educational program will help them achieve realistic career goals. A list of the general program goals and a chart depicting the exemplary program model is contained in Section I of this report. An analysis and interpretation of each goal is presented in advance of the data presented regarding it in Section V of this report.

Students who participated in the new and modified programs came from grades 5-10. The first classes organized in October, 1970, included 85 junior high students (grades 8 and 9) and 77 10th grade students. In January of 1971, all students in the 5th and 6th grades of the eight elementary schools were invited via a letter to their parents from the respective principals to participate on a voluntary basis in an Introduction to the World of Work Club. A total of 286 5th and 6th graders were enrolled by the end of January.

Records made available to the evaluation team indicated that nearly all the junior and senior high school students in the exemplary program were below average in reading and intellectual ability. Over half were one standard deviation below the mean or lower in reading. The reading and ability level of the 5th and 6th grade students in the exemplary project were widely varied due to the fact that students voluntarily participated.

PERSONNEL

The exemplary program originally called for the addition of a large number of teaching, counseling, and administrative personnel. Due to budget trimming and the difficulties of hiring peronnel late in the school year, only two new full-time teachers for the 10th grade were employed. In addition, sixteen teacher-sponsors at the elementary and junior high levels were recruited from the regular staff and paid additional salary for their exemplary program work.

At the 10th grade level, one woman trained and certified as a home economics teacher, was employed to provide cluster skill training to girls in the area identified as Home and Community Services occupations. A man trained and certified as an industrial arts teacher was employed to provide cluster skill training to the 10th grade boys in the Construction and Manufacturing occupations.

Three men and three women at the junior high level devoted one-sixth of their time to the program during the 1970-71 school year. Working at the 8th and 9th grade levels, these teachers with industrial arts and home economics backgrounds taught one career exploration class each.

At the elementary (5th and 6th grades) level, ten teachers were recruited from the regular staff and paid overtime to sponsor a vocational interest club which met once per week for one hour. Two of the eight elementary schools had two club sponsors each, and the other six schools, one sponsor each.

In addition to the eleven elementary, junior high and senior high principals, the administrative functions were carried out by a team of seven persons under the direction of Dr. Bruce Howell, Assistant Superintendent for Instruction and Mr. Morris J. Ruley, Director of the Vocational and Technical Education Department.

A list of all the key exemplary personnel follows in outline form.

Elementary	Teacher	No. of Students*	Class Time	Mtgs./Week
Irving	Karen Tyner	10	3:00-4:00	1
Jefferson	Garry Nichols	25	3:00-4:00	1
Johnson	Don McGowan	51	3:00-4:00	1
Lincoln	Helen Bailey	70	8:00-8:45	1
	Sara Abel		3:00-3:30	1
Longfellow	Darlene Mulliken	23	3:00-4:00	1
Lowell	Beth Cowen	50	3:00-4:00	1
	Steve Wigginton		3:00-4:00	1
Pershing	Eunice Copeland	27	3:15-4:15	1
Riverview	A. J. Holland	13	3:00-4:00	1
		269		

Junior High	Teacher	No. of Students*	Class Time	Mtgs./Week
Horace Mann	Betsy Foresman	9	9:00-11:00	5
	Joe Eastham	12	9:00-11:00	5
Lowell	Patricia Carson	12	11:30-1:30	5
	John Mayberry	10	11:30-1:30	5
Roosevelt	Jim Gray	15	12:30-2:30	5
	Frankie Roemer	17	11:30-1:30	5
		75		

Central High	Teacher	No. of Students*	Class Time	Mtgs./Week
	Iwannah Lusty	22	8:45-3:30	5
	Eugene Williams	32	8:00-3:30	5
		54		

* Reported Enrollment as of May 18, 1971

ADMINISTRATIVE PERSONNEL OTHER THAN PRINCIPALS

Dr. Bruce Howell - Assistant Superintendent for Instruction
Morris J. Ruley - Director of Vocational Education
Homer T. Towns - Assistant Director of Vocational Education
Frances W. Smith - Supervisor, Home and Family Living
Allie Dale Lambert - Supervisor, Business Education
George Wright - Local Project Coordinator (Part-time)
Laura McCall - Director, Elementary Curriculum

The administrative staff prepared and disseminated information regarding the goals, policies, and procedures to be followed in operating and administering the program.

Late funding and posting of job openings as well as salary limitations resulted in a shortage of counseling and coordinating personnel. On November 13, 1970, Mr. Ruley prepared a notice regarding personnel needed to implement the exemplary program. It described the three counselor and coordinator positions and the salary allocation for each. According to a March 26, 1971 memorandum to Dr. Gordon Cawalti, Superintendent, from Mr. Ruley which reported on the results of the personnel selection committee meeting, "no applications were received for the junior high counselor, only one for senior high counselor, and four for the elementary counselor-club coordinator. There were eight applicants for the project coordinator assignment". Although Mr. Dan Travis was selected as a possible elementary counselor-club coordinator and Mr. George Wright as the project coordinator, the new assignments were not made "because of the changes that would be necessary to complete these assignments and the assurance of funding through June 30." Instead it was the decision of the personnel committee and Mr. Ruley's office to hold the assignment of these positions until school was out.

In addition to the classroom and administrative personnel already mentioned, an advisory committee consisting of thirty-four Tulsa school administrative personnel and several State Department of Education personnel functioned in an advisory role.

PROCEDURES

The exemplary program for the Tulsa Public Schools was planned to run from the fall of 1970 through the summer of 1973 with funding planned on a year by year basis. This report is an evaluation of the first year of the program and in no way should be viewed as a summative report of the total program. As with any new program, it takes time to acquire the necessary personnel, to orient them to the project, recruit students, etc. before the program can move ahead at full speed. In the case of this project, the junior high and 10th grade programs started operating in October of 1970, but the elementary (5th and 6th grades) did not start operating until January, 1971. This report covers the progress made up to June 30, 1971 and includes analysis of subjective and objective data collected primarily during the week of May 17, 1971.

PHYSICAL ARRANGEMENTS

The 5th and 6th grade vocational interest clubs met for approximately one hour once per week in an activity room in their respective schools. The 8th, 9th, and 10th grade students met in regular classrooms and laboratories which were suited to the type of activities being conducted. For the most part, supplies in terms of project materials, tools, equipment, etc. were readily made available to the teachers requesting them. Many of the teachers sought and obtained large quantities of free occupational literature for classroom use and distribution to their students.

Facilities outside the classroom and laboratory were extensively used by some of the teachers. In some instances walking field trips were taken by the construction and manufacturing classes to observe and discuss construction projects which were underway on nearby streets. The home and community services class visited a cosmetic studio, an art museum, and the vocational-technical center. Other classes visited various commercial establishments, industries, a hospital, city health department, day care center, and an airline office to mention a few.

At the elementary level, several guest speakers were used including firemen who brought their truck with them, and other faculty menbers. Various games and audiovisuals were also extensively used by the interest clubs.

REVIEW AND INSERVICE TRAINING

Workshops were held on Saturday monring, September 19, Octover 31, December 12, January 16, February 6, March 6, and May 1 for the junior and senior high teachers who were involved in the project. These inservice training programs were used to coordinate activities, share ideas and materials, and to develop materials and policies for effectively carrying out the exemplary program.

Orientation meetings were also held with the principals of the elementary schools who were invited to participate in the project. In addition all exemplary project teachers were asked to submit a monthly report of activities to the administrative offices. This report which included sections dealing with: (a) the occupational areas explored, (b) the major units taught, (c) major class activities, (d) a list of needs, and (e) a list of plans, was one means used to coordinate the various activities in the program. Summaries of these reports were prepared and disseminated to all persons involved in the program.

It was also decided that each participant should regularly evaluate his efforts by listing reactions to the project, suggestions for overall improvement, etc. Another type of inservice training provided was the periodic issuance of bulletins and policy statements. Another major inservice training effort was a three week curriculum development workshop conducted June 7-25, 1971. Fifteen of the exemplary teachers attended the workshop which was held in conjunction with another group of teachers working in a similar program. The participants received instruction on behavioral objectives and spent most of the remaining time writing units of instruction.

ACTIVITIES

A concise description of the major activities carried out in the exemplary program at each level is presented below as regards each program objective and grade level. Appendix A of this report contains a copy of Bulletin #1 titled "An Exemplary Comprehensive Occupational Orientation Vocational Education Program in the Tulsa Public Schools". The bulletin, approved by the program administrators, provides a general description of the program at each grade level and was used to orient teachers and principals to the exemplary program. Also in Appendix A is Bulletin #2 which presents "Guidelines for Operating the World of Work Program in Elementary Education: Grades 5-6", Bulletin #3 which outlines the "Career Orientation Program for Seventh Grade Students", and a copy of a procedures and policies announcement issued by Mr. Ruley's office regarding operation of the program in grades 8-12.

Objective #1 - To establish methods whereby elementary school students may become acquainted with a wide range of occupations and the varied educational offerings of the school.

Students of the 5th and 6th grades of all eight elementary schools were invited to participate in this program via a letter to their parents from each of the elementary school principals. The letter described the purposes of the program as follows:

a. To develop a respect for all work,

b. To motivate all youth to want to participate in the world of work, and

c. To allow students to gain an awareness of the wide range of occupational opportunities available.

All students were invited to participate on a voluntary basis, although parent approval was requested.

The major activity used to implement this objective for the 286 students who were enrolled by January was through the use of special interest clubs. The schools, teacher-sponsors, number of pupils per teacher, and the time of meeting are shown on a chart presented earlier in this section.

The clubs met once per week after regular school hours, with one exception. In the Lincoln school, students were given a choice of attending a club meeting at 8:00-8:45 A.M. or at 3:00-3:30 P.M. They were formed around special interest areas such as horticulture, mechanics, electricity, etc. Community involvement was deemed essential to the program. Involvement of the community was carried out primarily through the use of field trips and the use of resource people. The resource persons who met with the various clubs included policemen, other teachers, armed forces personnel, and other public service employees. Field trips were taken by some of the clubs to the vocational-technical school and the telephone company.

In addition to the above, club activities used by one or more of the teacher-sponsors included making occupational trees, collecting and discussing newspaper want ads, constructing occupational time lines, role playing and pantomines, preparation of posters with various messages, using films and filmstrips, and bulletin boards. Comic type references were used by some teachers. Free discussion of viewpoints was encouraged, the importance of all types of work stressed, and whenever possible, student interests and hobbies were pursued in terms of how they might relate to occupations.

Objective #2 - To combine our latest findings relative to vocational guidance into a counseling and exploratory work experience program for junior high school students which will provide them with the necessary skills to make a reasonable occupational and training choice.

Two different approaches were used in an attempt to implement this objective. At the 7th grade level, a "career orientation and exploration course" was offered to all 7th grade students by means of the regular industrial arts, homemaking, and business education classes. At the 8th and 9th grade levels, emphasis was on "career exploration" and students were given an opportunity to explore in two-hour classes, various career clusters through simulated laboratory work experiences provided on a rotating basis.

At the 7th grade level, the intent as specified in Bulletin #1 and Bulletin #3 (see Appendix A) was to provide all students an opportunity to learn about the many jobs and careers available in the world of work. It was hoped that through an organized program of student-centered activities, the students would have a first-hand opportunity to observe and participate in the industrial processes which produce the products of our society.

The 7th grade program was operated by using regular staff from the practical arts curriculum. The program called for providing every 7th grade student with a minimum of 180 hours of "career exposure" so that all would have an opportunity to learn about jobs and careers regardless of whether they were going to be a skilled tradesman or a professional person.

As best as could be determined by the evaluation team, little was being done at the 7th grade level except providing the traditional practical arts courses in the areas of industrial arts, homemaking, and business education. Teachers completing the questionnaire indicated that one or more resource persons had been used to discuss career opportunities, however, the amount of time of the 180 class days devoted to "career awareness" in one case was only "4-5 days". All 7th grade students were required to participate in the practical arts program, the choice of the three available areas being primarily left up to the student.

The 8th and 9th grade "career exploration" program was conceived as a logical next step following career orientation in that it was designed to provide students enrolled an opportunity to explore in depth some job cluster areas such as construction, manufacturing, power, transportation and service occupations for the boys; and clerical, sales, health, and home and community services occupations for the girls. The exploration phase is designed to provide students a knowledge base upon which to make sound decisions regarding their educational and career futures. Boys selected for the program were enrolled in classes taught by industrial arts teachers who, using the same laboratories and in some cases classrooms, taught the exemplary students two hours per day and regular industrial arts students four hours per day. Girls selected for the program were taught by home economics teachers who also used the same facilities and taught in the exemplary program two hours per day and regular homemaking classes four hours per day. A list of the six teachers involved, figures on the size of their classes, and a time schedule is contained on page eleven of this report.

A quite limited number of students were selected for the exemplary program at the 8th and 9th grade level. All of the students (75) were classified as EMH (emotionally or mentally handicapped) students. Some of the specific criteria for participation in the program at this level included one or more of the following:

a. Limited ability in academic classwork

b. Low or inadequate motivation

c. Limited environmental opportunities to become acquainted with a variety of occupations

d. Restricted opportunity to learn or practice accepted social behavior

e. Physical or mental handicaps not serious enough to require special education.

A wide variety of activities were used in the junior high exploratory program. Community involvement centered around use of resource persons and use of field trips. They were extensively used by one of the home economics teachers who had taken her students on ten trips by the middle of January. Trips included such places as airline offices, a hospital, a child care center, several businesses and public service companies, and the vocational-technical center. Major units of instruction included the following topics by one or more of the teachers: production line work (making jigs, etc. for mass production of parts), writing letters of application , use of business machines, fundamentals of construction, building models of homes, small gas engines, grooming, proper manners, attitude development, money management, child care, basic cleaning techniques, and use of SRA occupational briefs.

Objective #3 - To provide skills training in a cluster of occupations at the tenth grade level which will insure entry level competency and potential advancement characteristics for success in cooperative programs or in day trade programs in the area school are home high school.

The 10th grade cluster and skill training phase of the program is designed to eventually receive students who have had previous orientation and exploratory experiences and provide them with skill training in a cluster of occupations selected by the student. The program at present is a two semester, two periods per day activity limited to the study of construction occupations for the boys and home and community service occupations for the girls. Although the guidelines given in Bulletin #1 (Appendix A) state that "most careful counseling will precede each student's selection of a cluster", in reality, at this time the students really do not have a choice of clusters from which to select.

The skills training was provided by two teachers who were employed specifically and on a full-time basis to work in the exemplary program. One was a certified home economics teacher who taught the girls skills related to home and community services occupations using a regular home economics laboratory and classroom. The other teacher was a certified industrial education teacher who taught the boys skills related to the construction trades using a regular industrial arts laboratory. Field trips to construction sites and local businesses were also used by both teachers.

As in the 8th and 9th grades, only a small number (67) of disadvantaged students were enrolled in the program. The same criteria as used in selecting the 8th and 9th graders was employed.

The thirty girls in Mrs. Iwannah Lusty's classes received instruction in the following cluster areas: general career exploration, health services, home nursing and housekeeping services, food services, personal development, child care services, and sewing services.

The thirty-seven boys enrolled in Mr. Eugene Williams construction occupations classes received instruction in the following major areas: masonry, electrical, carpentry, drafting, hand tools (carpentry), power tools (carpentry), painting and finishing, and employment. The students also were taught how to set up an assemply line for mass producing items by use of jigs.

More details about each of the skills taught may be gleaned by the interested reader from the 10th grade student questionnaires contained in Appendix B.

Objective #4 - To institute cooperative on-the-job training experiences in a cluster of occupations to intensify skill training and increase job readiness.

This objective was for students in the 11th and 12th grades, who after completion of skill training in 10th grade would enter the regular vocational program of the high school, the area vocational technical center, or one of the cooperative training programs. The cooperative vocational education (CVE) program is a program carried out with close cooperation between school and industry. The teacher-coordinator teaches related instruction in school for approximately one hour per day and also periodically supervises the on-the-job work of the student which averages three hours per day or fifteen hours per week.

Cooperative training programs were available in the areas of distributive education, industrial education, and office education. Few program changes were necessary at the 11th and 12th grade levels because a comprehensive cooperative vocational education training program had been implemented by the Tulsa schools on March 30, 1970. Attempts were made, however, to coordinate the exemplary program with the ongoing cooperative programs.

Objective #5 - To provide intensive skill training to those non-vocational (students) about to leave high school for a job.

According to a letter from Mr. M.J. Ruley dated June 30, 1971 this objective "was not implemented because of a number of things: (1) Lack of facilities, except machine shop and this (program), at the present time would have no outlet for employment; (2) There were not enough (students) in the same area indicating an interest; (3) The possibility of such training was discussed with the administration at Central High School; (4) An effort, as in the past, was made to help place students, both vocational graduates and non-vocational graduates in jobs the first of June."

Objective #6 - To increase the students' understanding of and desire for additional training beyond high school where appropriate.

Considerable effort was made in this area with all students. A brochure titled "The Choice is Yours" which explains the various offerings available to students at different levels and in the various program areas has been widely distributed. Separate brochures have also been prepared and distributed which explain the secondary, post-secondary, and adult vocational offerings available to students at the vocational-technical center. When various careers are discussed the teachers are asked to specify the type and amount of preparation needed to enter the occupations discussed. It is expected that they will also stress the need for continuing their education beyond high school in order to advance in their chosen field.

Objective #7 - To inaugurate supplementary training programs such as summer training for job entry.

Summer cooperative vocational education programs were operated in five senior high schools during June and July 1971. All of these programs ran for either four or eight weeks. A total of $6,185.00 was expended for salaries, fringe benefits, and supplies for the six programs located at Hale, East Central, Rogers, Webster (2), and Washington. Teachers were paid $150 per week and were required to meet State department qualifications for teacher-coordinators.

The cooperative vocational education program involves a cooperative arrangement between the school and employers. Students receive classroom instruction including required general education and related vocational instruction, by alternating study in school with a job in any occupational field. The students' experiences are planned and supervised by both the teacher coordinator and the employer so that each contributes to the student's education and to his employability.

Class size was limited to 15-20 students who could benefit from a cooperative program. They had to be 16 years of age in order to meet requirements of the labor laws and were to be mature enough to make an occupational choice. Students were given two credits or one unit for the summer CVE program based on two hours per day classroom time for forty days plus an average of not less than 20 hours per week of on-the-job training. Related instruction to supplement the practical training and experience received on the job was provided for at least two periods per day.

A training plan was specified to be prepared for each student so that all involved, student, teacher, and employer would know what was to be done. Students were paid the going rate for other employees of similar age and experience.

Objective #8 - To try alternative methods based on related research for using the facilities of the area school in an exemplary program.

An effort to make additional use of the facilities of the area vocational school resulted in what was called a Summer Career Orientation and Exploration Program (Project #5). According to Mr. Ruley, ten instructors were employed to work with approximately 125 students who had completed 9th grade.

During a March pre-enrollment, each interested student was asked to select four program areas from a list of ten offerings. The program areas offered were as follows: health occupations, and fashions and foods for girls only; auto mechanics, diesel mechanics, machine shop, and electronics for boys only; horticulture, printing and lithography, drafting, and technical occupations for boys and girls. The program started on June 3 and concluded on June 30, 1971 with each student spending one week in each of the four areas selected. Classes started at 8:30 A.M. and ended at 12:00 noon.

The program was designed to familiarize students with occupational opportunities, available occupational education programs, and the educational requirements for specific jobs. A letter which was sent to the students who enrolled stated "Interesting and informative sessions have been planned which will include field trips, demonstrations, and actual work experience activities. This type of program should provide you with information which will enable you to make wiser decisions concerning both your educational and vocational plans."

BUDGET

The Tulsa school system was notified in mid-September 1970, that their exemplary program had been approved in the amount of $107,252 for fiscal 1971. These funds were provided by the U.S. Office of Education, through the Oklahoma State Department of Vocational and Technical Education, under provisions of Part D of the Vocational Education Amendments of 1968. The total amount expended as of June 30, 1971 was $53,052.25. Following is a breakdown of these expenditures by major categories:

Description	Amount
Administration	
Local Coordination	$ 2,050.00
Local Evaluation and Reporting	559.65
Instruction	
Craftsmen and Consultants	1,450.00
Two Vocational Teachers	17,184.05
Industrial Arts Teacher	8,251.80
Home Economics Teacher	8,940.74
Supplies	1,680.46
Summer Intensive Training	3,920.00
Transportation	
Travel and Per diem	518.25
Operation	
Communications	8.76
Fixed Charges	
10% Salary	4,235.62
Sub-Total in Direct Costs	$48,799.33
Central Administration and Evaluation	4,252.92
Total Expenditures June 30, 1971	$53,052.25

Considering all the students (398) in grades 5 and 6, 8 and 9, and 10 who were provided substantial amounts of exemplary training, the total direct cost per pupil for the fiscal 1971 was $133.32. It should be recognized that much of the leadership and program coordination effort came from Mr. Ruley and members of his staff who were on regular salaries, and hence there was little administrative cost charged to the project this first year. The cost of salaries was also low due to the fact that a full-time project coordinator and three counselor-coordinators who had been approved as new personnel were not hired. The low total cost is also partly a reflection of the fact that the program was not in operation for a full year. One reviewing the costs should also be aware that student contact with the program was limited to approximately one hour per week for the 269 elementary students and to two hours per day for the 129 junior high students.

SECTION IV

EVALUATION OF THE PROCESS AND PRODUCT

METHODOLOGY

Little up to this point has been said about the methodology used to evaluate the Tulsa Exemplary Program. First it should be noted that this evaluation report is an interim report and therefore primarily a formative type of evaluation. The major purpose of the evaluation was to collect valid and reliable data about the program process and the program outcomes, and to objectively analyze the data in terms of the established program objectives so as to make sound recommendations for improving the program.

A plan for collecting both objective and subjective data about the exemplary program was devised after a careful analysis and interpretation was made of each general program objective. A copy of each of the instruments selected or developed may be found in Appendix B and a summary and explanation of how each was used is in Appendix C.

Due to the small number of individuals involved at each level, an attempt was made to collect data from all exemplary students in grades 5,6,8,9, and 10. For grades 8,9, and 10 a control group equated as closely as possible on the basis of age, sex, race, and reading and IQ scores was selected. The students were contacted in a group setting by members of the evaluation team.

Students in grade 7 were omitted because only minor changes in the regular practical arts program were reported for that grade level. Students in grades 11 and 12 were also omitted because essentially the same programs are being offered at that level as were offered prior to the exemplary project.

Teachers in grades 5 through 12 who were involved in planning and conducting the program were contacted personally and asked to complete a teacher questionnaire, a process evaluative criteria form, and a narrative of their program activities.

The exemplary program was observed in operation and data collected about it during on-site visitations by one or more members of the evaluation team during April 13-14 and May 17-21, 1971. The actual administration of student and teacher data collection instruments took place during the week of May 17th. In addition several phone calls were made and letters written to ask for additional information. Data collected by Mr. Ruley and his staff for the quarterly reports and inservice training meetings and made available to us, was also very useful in assessing the program.

LIMITATIONS AND ASSUMPTIONS

Due to the ex post facto nature of the evaluation (detailed evaluation procedures were not developed at the time the proposal for the project was written, nor were they developed prior to launching the exemplary project), certain limitations were imposed on the evaluation effort:

1. Pretest data was not available on any of the students.
2. The general objectives as stated in the original proposal were not clearly defined nor stated in measurable terms.
3. Because of the initial student selection process, it was very difficult to select closely equated control groups.
4. The late start and short period of time, approximately May 1 - August 15, 1971, during which the total evaluation activity was carried out imposed an undesirable handicap.

The assumption is made that the instruments selected and developed were both valid and reliable for the purposes for which they were used. Time restrictions prevented any retesting to determine the degree of instrument reliability. Instruments selected and developed were considered to be the best available by the project staff for obtaining evidence about each of the projects objectives.

The assumption was also made that students were able, in spite of their limited abilities, to understand the questions asked. Procedures for administering the instruments were consistent, and took into account the reading and intellectual abilities of the students.

Objective #1 - To establish methods whereby elementary school students may become acquainted with the wide range of occupations and the varied educational offerings of the school.

This objective was interpreted as having two major subobjectives as follows:

a. To acquaint elementary students with a wide range of occupations and
b. To acquaint elementary school students with the varied educational offerings of the school.

A list of twelve specific objectives for grades 5 and 6 which were included as an appendix to the original program proposal are reproduced in Appendix D. In the opinion of the evaluation team many of those objectives, especially #3,5,6,7, and 8, are unrealistic objectives for elementary students.

Objective #1 was implemented by organizing ten special interest clubs for 5th and 6th graders in eight elementary school. Participation was open to all students on a voluntary basis. The program at this level began in January 1971 with 286 students enrolled. Seventeen students dropped out by mid May for lack of interest or conflict with other school activities, leaving 269 still in the program.

ASSESSMENT OF THE PRODUCT

To determine the extent to which students in the 5th and 6th grade world of work clubs were acquainted with a "wide range of occupations" and to assess their attitude relative to the fact that "all work has value", Student Questionnaire #1 was administered. The extent to which students could list occupations they had become acquainted with as a result of their participation in a special interest club was considered to indicate the degree to which they were acquainted with a wide range of occupations. Being able to give the name of a worker in each occupation was considered a further indication of their familiarity with those occupations. Whether they checked all the occupations they listed as worthwhile or not, was considered an indication of their attitude toward the value and dignity of all types of work.

Student Questionnaire #2 was administered to determine the extent to which students were acquainted with the "varied educational offerings of the school" and their relationship to preparation for actual jobs. Item C was used to further assess their understanding of twelve common occupations by asking them to indicate the amount of education normally required for entering each of them and the salary that they felt workers in each of the occupations made.

Table 1 which summarizes the information obtained from Student Questionnaire #1 lists each elementary school and the mean number of occupations listed by the students (maximum space = 25); the mean number of occupations checked as important; and the mean number of workers' names given by the students. The number of students enrolled in each school and the number completing the questionnaire is also given.

There is considerable variation between the mean scores of students from the different schools. For example, the students at Longfellow listed only an average of 8.9 occupations while the students at Riverview were able to list an average of 24.2. The total mean for the number of occupations listed, 24.7, indicates that these 5th and 6th grade students are familiar in most cases with a fairly wide range of occupations. For some unexplained reason, the students at Lowell and Longfellow were considerably less well acquainted with a wide range of occupations.

TABLE 1

SUMMARY OF RESPONSES BY FIFTH AND SIXTH GRADE STUDENTS TO SELECTED OCCUPATIONAL FACTORS, BY SCHOOL, N = 171

	Elementary School								
Occupational Factor	Riverview	Johnson	Longfellow	Irving	Lincoln	Pershing	Lowell	Jefferson	Total or Weighted Mean
Number of students enrolled	13	51	23	10	70	27	50	25	269
Number of students tested	9	32	17	7	57	22	13	14	171
Mean number of occupations listed (max. = 25)	24.2	18.2	8.9	15.4	13.1	16.6	9.7	15.5	14.7
Mean number of occupations checked as important	19.1	12.2	6.8	10.4	11.6	14.0	8.3	13.0	11.7
Mean number of workers' names listed	13.8	5.2	4.5	5.0	5.2	9.8	5.0	4.0	6.0

With only two exceptions there was a small difference between the number of occupations listed and the number checked as being important. Overall there was a difference of approximately 20% between the mean number of occupations listed (14.7) and the mean number of occupations checked as important.

Students in a large majority of cases were not familiar enough with a person or persons working in the occupations to actually give their name. The mean number of workers' names listed was only 6.0 as contrasted with the listing of an average of 14.7 different occupations.

On Student Questionnaire #2 (Item B), most of the students placed a check after each subject listed to indicate that they felt the subject would help them in their future job. There was some tendency to not check art, music, and gym as subjects which would help them in a future job.

A summary of other information obtained from the questionnaire, which deals with salary, education required, and educational offerings is presented in Table 2

The mean scores listed for knowledge about education and salary were derived by deducting the total points missed from the maximum possible score of 36. Three points were assigned for a correct response, two points for selecting B when A was correct, and one point for selecting C when A was correct. Therefore, the maximum possible score was 3 x 12 or 36 points and the minimum possible was 1 x 12 or 12 points.

As indicated in Table 2 there was very little variation between the eight schools on either the salary or education factor. It appears that all students have a relatively good understanding of the education required and the salary that workers make in each of the twelve selected occupations.

The situation with regard to educational offerings varied widely from school to school and from junior high to senior high levels. As Table 2 indicates, the percentage of 5th and 6th graders able to list three or more junior high courses ranged from a high of 100% in three schools to a low of 57% in Irving. The high percentage listing three or more courses may in part be due to the fact that many of the courses listed were courses also offered at the 5th and 6th grade level and students may have simply tended to list what they were currently taking.

The percentage of students listing three or more senior high courses was, as might be expected, considerably lower in all but one school. Almost without exception the courses listed were the same ones as listed for junior high offerings. There was no mention of any

TABLE 2

SUMMARY OF RESPONSES BY FIFTH AND SIXTH GRADE STUDENTS TO QUESTIONS REGARDING SALARIES, EDUCATION, AND EDUCATIONAL OFFERINGS, N=171

	Elementary School							
Factor	Riverview	Johnson	Longfellow	Irving	Lincoln	Pershing	Lowell	Jefferson
Mean score on knowledge about education required for entering occupations	31.5	27.8	29.8	29.1	28.5	29.0	30.7	30.4
Mean score on knowledge about salary earned by various workers	31.2	29.0	29.9	30.3	28.1	30.6	28.4	31.0
Percentage of students who listed three or more junior high courses	100	97	63	57	74	91	100	100
Percentage of students who listed three or more senior high courses	100	66	18	28	46	86	54	72
Percentage of students who listed at least one job related to one of the courses listed	22	3	5	0	40	77	84	64

pre-vocational or vocational offerings at either the junior high or senior high level. Apparently the students are unaware of the pre-vocational and vocational offerings available.

With the exception of Lowell and Jefferson students, few listed even one job related to one of the courses they had listed. It is apparent that these 5th and 6th graders are not yet making many close associations between course offerings and the type of job they prepare one for.

In summary, the student behavioral outcomes sought under Objective #1 are being attained to a relatively high degree by students in all but two schools as far as "acquaintance with a wide range of occupations" is concerned. The depth of their familiarity, however, is open to question as judged by the inability of students to list workers employed in a majority of the occupations. As far as "acquaintance with the varied educational offerings of the school is concerned, the program has been less successful, especially in the Longfellow and Irving schools. It was also noted with alarm that the students failed to name any of the available vocational course offerings. One could rightly challenge, however, the appropriateness of an objective which calls for elementary students to be acquainted with the varied (total is implied) educational offerings of the school.

ASSESSMENT OF THE PROCESS

In order to evaluate the practices and procedures used to implement the objectives of the exemplary program, a process self-evaluation form was personally handed by members of the evaluation team to each of the exemplary program teachers. They were asked to complete the form and return it directly to a member of the evaluation team.

Using the following rating scale, the teachers were asked to rate individual evidence questions (see Appendix B for copy of instrument) and then considering all their evidence ratings, to determine an overall rating for each summary question.

Code	Rating Scale
5	Excellent - conditions or provisions are extensive and functioning well
4	Very Good - conditions or provisions are moderately extensive and functioning well
3	Good - conditions or provisions are average and functioning satisfactorily
2	Fair - conditions or provisions are limited and functioning unsatisfactorily

1	Poor - conditions or provisions are very limited and functioning poorly
M	Missing - but needed
N	Missing - but not needed

The thirty-one questions were grouped under the following major headings: (a) general program, (b) facilities and instructional materials, (c) coordination and planning, (d) professional growth, and (e) public relations.

A summary of the responses made to each of the questions by the ten 5th and 6th grade teachers is presented in Table 3. On seven items the mean score for the item was 2.75 or lower. These means do not include the number of teachers who said the item was "missing but needed".

TABLE 3

SUMMARY OF PROCESS SELF-EVALUATION

RESPONSES OF TEN 5th AND 6th GRADE TEACHERS

Question*	Range of Scores	Mean Score	No. of M's	No. of N's
1. Is instruction geared to individual student needs and differences?	M-4	3.33	1	-
2. Can all students freely elect to participate in the program?	4-5	4.9	-	-
3. Are the objectives of the exemplary program realistic?	2-5	3.9	-	-
4. Is meaningful instruction provided for relating interests, aptitudes, and abilities to occupations?	N-5	3.66	-	1
5. Are self-concepts presented in a meaningful manner?	3-4	3.6	-	-
6. Are economic activities and concepts related to occupations?	N-4	3.2	-	1

* These questions have been abbreviated to save space. See Appendix B for the complete question.

Question	Range of Scores	Mean Score	No. of M's	No. of N's
7. Are general orientation concepts presented regarding occupations?	3-4	3.3	-	-
8. Is a basis provided students for selecting future courses?	2-4	3.0	-	-
9. Do students evaluate themselves and make future plans?	N-4	3.25	1	1
10. Is instruction directed toward clear objectives?	1-5	2.9	-	-
11. Are activities carefully planned and scheduled?	2-5	3.5	-	-
12. Do students participate in planning their activities?	3-5	3.7	-	-
13. Are opportunities provided for variety of activities?	2-5	3.1	-	-
14. Do teachers have adequate time to prepare and coordinate instruction?	N-3	1.7	5	1
15. Is material for instruction well organized?	M-3	2.25	2	-
16. Dealt with specific teaching techniques	-	-	-	-
17. Are students given an opportunity to explore occupational opportunities?	M-3	2.5	1	-
18. Does a special occupational interest club exist?	3-5	3.9	-	-
19. Are storage and display facilities adequate?	M-5	3.0	-	-
20. Are provisions made for purchasing equipment and materials?	N-4	2.2	-	1
21. Do instructional materials provided stimulate appropriate practical student activities?	N-4	2.75	-	2
22. Are plans made to follow-up the interests developed by students?	N-5	3.9	-	1
23. Is there cooperation between the counselor and exemplary teacher?	M-5	3.28	3	-

24.	Are meetings to coordinate the efforts of all exemplary teachers held?	N-5	4.3	-	1
25.	Has the exemplary program been explained to other teachers and coordinated with other programs?	N-5	3.1	1	1
26.	Is an advisory committee being used to help plan and evaluate the program?	N-1	1.0	7	2
27.	Is counseling interwoven into the exemplary program?	M-5	3.0	3	-
28.	Open-ended question				
29.	Open-ended question				
30.	Are students well oriented to the program before they enroll?	N-5	3.4	2	1
31.	Has a planned and coordinated public relations program been implemented?	M-4	2.75	2	-

The seven items receiving the lowest ratings were #14, 15, 17, 20, 21, 26, and 31. Three of these items relate to the availability of sufficient and appropriate instructional materials, supplies, and equipment (15, 20, 21). The item receiving the lowest rating was #26 which relates to the use of an advisory committee to help plan and evaluate the program. Seven teachers rated this item as "missing but needed", one rated it as "poor", and one as "missing but not needed".

Item #14, "Do teachers have adequate time to prepare and coordinate instruction" was given a rating of "missing but needed" by five of the teachers, and a 1.7 or "fair" by four of the teachers. The teachers ranked from "fair to good" item #17 regarding whether the students had an opportunity to explore occupational opportunities and item #31 regarding the implementation of a planned and coordinated public relations program

The exemplary program was rated 3.7 or higher on six different items by these same teachers. The six items receiving the highest ratings were #2, 3, 12, 18, 22, and 24. The highest ratings were given to #2 which asked if all students could freely elect to participate in the program (4.9) and #24 which asked whether program coordinating meetings were being held (4.3). Other factors receiving a high rating included realistic program objectives, student participation in planning activities, the existence of special occupational interest clubs, and plans made to follow-up student interests.

The other evaluative instrument administered to all teachers was a questionnaire which asked the teachers to state what they considered to be the five major strengths of the program, the five major needs or weaknesses of the program, and recommendations that they felt would improve the program.

The four major strengths listed were as follows:

a. Students have an opportunity to develop a positive interest in work and a desire to be a productive member of society.

b. Students are presented the opportunity to learn about the dignity of all kinds of work.

c. Students were able to gather up-to-date and accurate job information on a variety of occupations.

d. Students were helped to see that work can be enjoyable.

The major weaknesses or needs and the frequency with which they were listed by the ten teachers were as follows:

a. More well organized materials related to occupational clusters and written on a level of interest to elementary students are needed(9).

b. More specific guidelines for operation of the program(7).

c. More time to properly plan the club program (5).

d. More field trips are needed(4).

e. A program coordinator is needed (3).

f. Better methods of informing the faculty are needed (3)

g. A list of available community resource people is needed (3).

Among the recommendations made by the ten teachers for improving the program were the following:

a. Develop a realistic curriculum for the program (during the summer workshop).

b. Employ a full-time program coordinator.

c. Hold monthly meetings of teacher-sponsors to share ideas and concerns.

d. Provide more hands-on experiences for club members.

e. Develop guidelines for appropriate student activities.

f. Develop a coordinated speakers bureau for all schools in the exemplary program.

g. Employ a counselor to work closely with the teacher-sponsors.

h. Provide easier access to films and other audiovisuals, literature, etc. related to work areas in the program.

It should be noted that although originally planned, volunteer club sponsors from local business and industry were not recruited to work closely with the teachers. Similarily, plans to establish local advisory committees to help in building and operating the programs were not implemented. Likewise, little evidence was found of any attempt to involve older students or parents in the program.

Objective #2 - To combine our latest findings relative to vocational guidance into a counseling and exploratory work experience program for junior high school students which will provide them with the necessary skills to make a reasonable occupational and training choice.

This objective was interpreted as calling for the involvement of junior high school students in a counseling and exploratory work experience program that would give them a basis for making reasonable occupational and training choices. Since there had been little change in the regular practical arts programs offered at the 7th grade, efforts to evaluate this objective were centered on the program and students in the 8th and 9th grades.

At the 8th and 9th grades, the objective was implemented by providing two hours per day blocks of instruction in what was called a "career exploration" program. Students for the exemplary program at this level were selected by school personnel using the criteria outlined on page sixteen of this report. Approximately 85 EMH students were selected for participation in the program, 75 of whom were still enrolled as of May 18th. Of those leaving, seven were reported as moving to another school, two were reported simply as having moved, and one left due to pregnancy.

Assessment of the Product

In order to assess objectively the ability of students to make a reasonable occupational and training choice, it was decided to administer the Ohio Vocational Interest Survey (OVIS) to all the 8th and 9th grade students in the exemplary program and for comparison purposes, to a similar group of control students. The control students were selected with the assistance of Dr. Paul McCloud, Director of Research for the Tulsa Public Schools, from four junior high schools with a similar socio-economic mixture of students. An approximately equal number of students were selected on the basis of similar age, sex, race, reading and IQ scores.

The rationale for using the OVIS instrument, which is a two-part standardized interest inventory and questionnaire, was to determine whether the exemplary students made more realistic occupational choices as a result of their participation in the exemplary program than did similar students enrolled in a traditional program. The premise advanced was that the stated occupational choices (questionnaire part of instrument) of well informed students would match to a high degree with their tested interests (inventory part of instrument). In such case the exemplary students receiving career exploratory experiences should show a higher degree of consistency between stated choice and tested choice than those not receiving such career experiences.

Before presenting the results the evaluators wish to point out that since the reading levels of these students was considerably below normal, the test directions and questions were read to all the students by members of the evaluation team. Consistent procedures were followed in all schools, however, the test was standardized with students who read the instrument themselves. Even though the normal procedure for administering OVIS was not used, the results in this case should not have been affected because both groups who are being compared, the exemplary and the control, were administered the instrument in the same way.

The results are presented in Tables 4 and 5. The tables show the percentage of agreement between the students' first and second stated occupational choices and their tested interest scale positions. Table 4 shows the percentages by school and overall for the exemplary students. For example, 31% of the Lowell students' stated first choice was also their tested interest scale first choice. For 38% of the Lowell students, the first stated choice was not among the first four tested interest scale positions. The reader should note that there is not a large difference among any of the percentages, especially when one considers the small number of students involved per school.

Table 5 presents a similar summary of the data obtained from the four comparison junior high schools. The greater diversity or variance in percentages should be noted. For example, at Lewis and Clark 34% of the students' stated first choice matched their highest tested interest scale position, while at Wright, only 4% of the students' stated first choice was the same as their highest tested interest scale position.

TABLE 4

SUMMARY OF PERCENTAGE OF AGREEMENT BETWEEN STATED OCCUPATIONAL CHOICES AND TESTED INTEREST SCALE POSITIONS ON OVIS BY EXEMPLARY STUDENTS, N=61

School	Stated Occupational Choice	Tested Interest Scale Position 1	2	3	4	Below 4
Lowell Junior High	First	31	12.5	12.5	6	38
	Second	18	18	6	-	58
Roosevelt Junior High	First	21	12.5	12.5	8	46
	Second	25	4	8	-	63
Horace Mann Junior High	First	24	5	5	10	56
	Second	5	10	5	10	70
All Exemplary Schools	First	25	10	10	8	47
	Second	16.5	10	6.5	3	64

The evaluators are unable to explain why the first and second stated choices of the Lewis and Clark school students matched their tested choices better than in any other school, exemplary or control. One factor that might partially explain the difference is that the Lewis and Clark is located more on the outskirts of Tulsa than were most of the other schools.

At the bottom of Table 4 and Table 5, the combined responses for all the exemplary students and all the control students, respectively, are presented. The first stated and first tested choice matched in 25% of the cases for the exemplary students and in 20% of the cases for the control students. In the case of the second stated choices, the first tested scale positions matched 28% of the time with control students and only 16.5% of the time with the exemplary students. Of equal, if not greater importance is the fact that 47% of the exemplary students and 48% of the control students first stated choice did not match with any of their first four tested choices.

TABLE 5

SUMMARY OF PERCENTAGE OF AGREEMENT BETWEEN STATED OCCUPATIONAL CHOICES AND TESTED INTEREST SCALE POSITIONS ON OVIS BY CONTROL STUDENTS, N=89

School	Stated Occupational Choice	Tested Interest Scale Position 1	2	3	4	Below 4
Anderson Junior High	First	21	21	-	21	37
	Second	7	7	7	7	72
Foster Junior High	First	24	14	14	14	34
	Second	19	5	9	19	48
Wright Junior High	First	4	18	7	11	60
	Second	22	4	-	4	70
Lewis and Clark Junior High	First	34	-	8	8	50
	Second	54	4	4	12	26
All Control Schools	First	20	12	8	12	48
	Second	28	4.5	4.5	10	53

It is apparent that there are greater differences in the percentages in nearly all categories between the schools within each group than there are between the two groups themselves. The premise that the exemplary students would show a higher degree of consistency between stated choices and tested choices was not borne out by the findings. The data for both the exemplary and the control students does indicate that there was a great difference between what the students said they wanted to do on the questionnaire, and their tested or inventoried occupational interests. The fact that nearly 50% of the students' first stated choice did not match with any of their first four tested choices, certainly indicates many of these students are lacking in vocational knowledge or occupational information sufficient to make reasonably consistent choices.

Assessment of the Process

As in the case of Objective #1, a process self-evaluation form was given to each of the teachers working at this level in order to evaluate the practices and procedures being used to implement this objective. Since only a small number of teachers were involved, the data is presented in narrative rather than table form.

There was considerable agreement on the following factors which were rated as either very good or in most cases excellent:

a. Are activities carefully planned and scheduled?

b. Are students given an opportunity to explore occupational opportunities?

c. Are meetings to coordinate the efforts of all exemplary teachers regularly scheduled?

The following factors were rated as "missing - but needed" by all teachers who completed the self-evaluation form:

a. Can all students freely elect to participate in the program?

b. Do teachers have adequate time to prepare and coordinate instruction?

c. Does a special occupational interest club exist?

d. Has the exemplary program been explained to other teachers and coordinated with other programs?

e. Is an advisory committee being used to help plan and evaluate the program?

f. Is counseling interwoven into the exemplary program?

The following strengths were listed by two or more teachers on the open-ended teacher questionnaire:

a. Field trips to various industries in order for students to gain first hand knowledge of career opportunities.

b. Opportunity for students to learn basic skills which are preparatory for a job or further vocational training.

c. Available funds for purchasing needed teaching supplies.

The major needs or weaknesses listed by the same teachers were:

a. The program is limited to a small number of students but should be open to all students.

b. An improved fully developed curriculum in career exploration is needed.

c. The objectives of the exemplary program need to be explained to the entire faculty so that other teachers will better understand the goals and support the program.

d. Lack of a public relations program.

These same teachers were asked to make specific recommendations for improving the program. They included the following suggestions:

a. Purchase of additional instructional materials such as textbooks and various audiovisual aids.

b. Establish an orientation program for the parents of prospective students.

c. Provide teachers more assistance in arranging for field trips and resource people.

d. Explain objectives of exemplary program to all administrators, counselors, and teachers so they can advise students regarding the program.

e. Establish a ready cash fund for each teacher that can be used to quickly purchase low cost supplies needed with principal's approval.

Objective #3 - To provide the skills training in a cluster of occupations at the tenth grade level which will insure entry level competency and potential advancement characteristics for success in cooperative programs or in day trade programs in the area school or home high school.

This broadly stated objective was translated into two major sub-objectives as follows:

a. To provide 10th grade students with skills training in a cluster of occupations that would insure entry level competency for success in cooperative programs or in day trade programs offered in the area vocational center or the home high school and

b. To provide these students with the "potential advancement characteristics" required for success in the same programs.

This objective was implemented at the Tulsa Central High School by establishing two separate classes, one for the boys and another for the girls. The classes were a two period per day activity limited to the study of construction occupations for the boys and the study of home and community service occupations for the girls. Students were selected by school personnel using the criteria outlined on page sixteen of this report. Although 77 students enrolled in the fall of 1970, by May of 1971, only 54 students were still enrolled. Students left the program for a variety of reasons which included: 1. removed from rolls for non-attendance (6 boys), 2. changed to another course (5 students), 3. dropped out to work at home (4 girls), 4. transferred to another school (2 girls), and 5. withdrew because of pregnancy (3 girls).

Assessment of the Product

To determine the extent to which the students had actually attained skills training in a cluster of occupations that would insure likely success in the 11th and 12th grade vocational programs, two student questionnaires, (see Appendix B) one for the boys and another for the girls, were designed to assess the degree or level of ability which the students felt they had achieved. In order to develop the instrument, each exemplary teacher was asked to specify the various units and related skills they had taught during the year. From this information, instruments with a four point rating scale were devised and administered to the exemplary students and a group of control students from the same high school. The control students had similar academic capabilities and similar course loads with the exception of the exemplary course.

A summary of the girls' responses converted to percentages and reflecting the level of achievement for each skill is presented in Table 6. The summary indicates that a higher percentage of the exemplary girls than the control girls rated their level of achievement as excellent for each of the skill areas. It should also be noted that the percentage of exemplary students rating their level of achievement as excellent was considerably higher in the case of home nursing, food service, and personal development skills. By combining the frequency of responses for all the skill areas and figuring the percentage for exemplary versus control students, it was found that 38% of the exemplary students rated their level of achievement as excellent while only 29% of the control students rated their achievement as excellent. It appears that the exemplary girls overall and especially in certain skill areas felt somewhat more confident of their ability than did the control girls.

A similar summary of the boys' responses to a similarly developed skill assessment instrument is shown in Table 7. Only a very few major differences were found between the ratings of the exemplary boys and the control boys. A considerably higher percentage of the control students rated their achievement as excellent in the areas of hand tools and employment skills. A considerably higher percentage of the control students, however, rated their achievement in drafting as poor. Overeall there were only small differences in the percentages obtained.

TABLE 6

SUMMARY OF RESPONSES IN PERCENTAGES OF
GIRLS TO SELF-ASSESSMENT OF SKILL ACHIEVEMENT,
N=16 FOR EXEMPLARY AND N=17 FOR CONTROL

Skill Area	Excellent		Good		Fair		Poor	
	Ex.	Con.	Ex.	Con.	Ex.	Con.	Ex.	Con.
Career Exploration	21	20	43	46	27	29	9	5
Health Services	19	15	52	54	23	21	6	10
Home Nursing	56	36	29	42	12	18	3	4
Child Care	40	37	46	43	12	20	2	0
Food Service	52	38	42	48	6	13	0	1
Personal Development	45	29	55	54	10	17	0	0
Sewing Services	34	30	41	30	24	33	1	7
All Skills	38	29	42	44	17	23	3	4

To assess the potential advancement characteristics required for success in the 11th and 12th grade vocational programs, it was decided to use part of the School Sentiment Index which was developed by Instructional Objectives Exchange of Los Angeles, California. Four dimensions or aspects of attitude toward school were selected. They included forty-four statements which were designed to assess students' attitudes toward learning, toward the school social structure and climate, toward their peers, and toward school in general.

The premise advanced for use of this instrument was that improved attitudes towards the various aspects of school life would contribute greatly to characteristics necessary for success in other vocational programs. In order to determine how successful the exemplary program was in developing these characteristics, it was decided to administer the instrument for comparison purposes to the same control students as were used for the assessment of skill achievement.

TABLE 7

SUMMARY OF RESPONSES IN PERCENTAGES OF BOYS TO SELF-ASSESSMENT OF SKILL ACHIEVEMENT, N=24 FOR EXEMPLARY, N=17 FOR CONTROL

Skill Area	Excellent		Good		Fair		Poor	
	Ex.	Con.	Ex.	Con.	Ex.	Con.	Ex.	Con.
Masonry	26	20	37	40	31	34	6	16
Electrical	4	12	19	14	38	26	39	48
Drafting	19	8	21	6	41	34	19	52
Carpentry	11	13	26	32	43	25	20	30
Handtool	27	40	43	44	29	11	1	5
Power Tools	25	35	51	59	16	6	8	0
Painting	14	18	28	26	38	35	20	21
Employment	10	25	45	53	39	22	6	0
Totals	17	21	33	32	35	25	15	22

The null hypothesis that there would be no significant differences between the means of the exemplary and control students was tested separately for both the boys and the girls. A t-test was computed to determine whether there were any statistically significant differences between the means for each group. Table 8 presents the means for each group and the results of the statistical test.

TABLE 8

SCHOOL SENTIMENT INDEX MEANS FOR TENTH GRADE CONTROL AND EXEMPLARY STUDENTS

	Control		Exemplary		Value of T	P
	N	Mean	N	Mean		
Boys	17	114.5	23	111.1	-.8748	.3872
Girls	19	114.6	17	128.1	3.2976	.0024*

* Significant beyond the .01 level.

The t-value for the difference between the means for the control girls (114.63) and the means for the exemplary girls (128.1) was 3.2976. The probability of a t-value this large occurring by chance is .0024. Therefore, there is a statistically significant difference between the mean scores for the two groups and the null hypothesis of no significant difference is rejected for the girls. Based on the School Sentiment Index, the exemplary program had a significantly positive influence on the girls enrolled in the program as compared to similar girls not enrolled.

The t-value between the means for the exemplary and control boys was small and the probability of the difference occurring by chance was large. The t-test for significance resulted in a t-value that was not significant, even at the .05 level. Therefore, the null hypothesis of no significant differences between the attitudes of the two groups of boys was accepted.

Assessment of the Process

As in the case of the other objectives and grade levels, a process self-evaluation form was given to each of the teachers in order to help evaluate the practices and procedures being used to implement this objective. Since only two teachers were involved, the findings are again summarized in narrative form:

There was a high degree of agreement on the following factors between the two teachers who rated them either very good or excellent:

a. Is instruction geared to individual needs and differences?

b. Is a basis provided students for selecting future courses?

c. Do students evaluate themselves and make future plans?

d. Are activities carefully planned and scheduled?

e. Are opportunities provided for a variety of opportunities?

f. Are provisions made for purchasing equipment and materials?

g. Are plans made to follow-up the interests developed by students?

h. Are meetings to coordinate the efforts of all exemplary teachers held?

The following factors were rated as missing-but needed by both teachers:

a. Does a special occupational interest club exist?

b. Is an advisory committee being used to help plan and evaluate the program?

One teacher in each case rated the following items as missing-but needed:

a. Can all students freely elect to participate in the program?

b. Is there cooperation between the counselor and exemplary teacher?

c. Has a planned and coordinated public relations program been implemented?

Some of the program strengths as listed by the teachers on the open-ended questionnaire were:

a. Opportunities students have to study different job areas.

b. Strong support of program by supervisors.

c. Coordination of efforts between schools.

d. Individual attention given to students - which results in improved attitude and better self-concepts.

Some of the major weaknesses specified included:

a. Lack of sufficient counseling services.

b. Lack of petty cash funds to use for purchase of low cost supplies.

c. Problem of transportation for field trips.

d. Shortage of printed materials for distribution to students.

These teachers also made the following recommendations for program improvement:

a. Provide more counseling services including the pretesting of students so as to give teachers more information on the potential of each student.

b. Establish petty cash funds for each teacher.

c. Allow larger initial enrollments in anticipation of the expected high dropout rate.

d. Employ an English teacher to help students improve their reading and writing ability.

Objective # 4 - To institute cooperative on-the-job training experiences in a cluster of occupations to intensify skill training and increase job readiness.

Since cooperative vocational education programs in the areas of industrial training, distributive education, and office education were already in operation at Central High School when the exemplary program was initiated, the major effort made to implement this objective was to coordinate those programs with the exemplary program. No attempt was made by the evaluation team to evaluate the outcomes of these programs mainly because there was only slight modification from the prior program at this level.

A total of fifty-eight students elected to participate in the three cooperative programs during the 1970-71 school year.

According to Bulletin #1 (see Appendix A) and the original exemplary proposal a "big brother" system in which a craftsman is encouraged to sponsor a trainee was to be initiated. As far as the evaluation team could determine, there was little or no effort made to actually implement this idea.

Another concern regarding this objective is the minimal attempt being made to coordinate the cooperative programs with the other exemplary programs. This is evident in that listings of the students in organized exemplary classes do not include the students enrolled in the cooperative training programs (quarterly report - April 1 - June 30, 1971). The teachers of these programs did not attend the inservice training meetings held during the year nor the three week inservice workshop held in June.

As in the case of the first three objectives, the three teachers involved in the program at this level were asked to complete a process self-evaluation form in order to help evaluate the procedures and practices being used to implement this objective.

Four of the factors rated as either good or excellent by each of the three teachers were as follows:

a. Is a basis provided students for selecting future courses?

b. Do students evaluate themselves and make future plans?

c. Is instruction directed toward clear objectives?

d. Do teachers have adequate time to prepare and coordinate instruction?

Only two items were rated as only fair or as missing-but needed by at least two teachers:

a. Is there cooperation between the counselor and exemplary teacher?

b. Is an advisory committee being used to help plan and evaluate the program?

One teacher responded to question #29 which asked the teacher to "specify any inservice training which you feel would help you become a more effective exemplary program teacher" by writing, "I think a better knowledge of the program would be helpful". This comment would again appear to reflect the lack of sufficient program coordination at this level.

These teachers also completed a teacher questionnaire which asked them to list and briefly describe the five major weaknesses and the five major strengths of the program plus give their recommendations for its improvement. Points on which there was consensus as to strengths of the program follow:

a. Students train under actual working conditions which provide insight into the world of jobs, into what working conditions are, and into what employers expect.

b. Students gain insight into the world of work before graduation and make a gradual transition from school to industry.

Four points which the teachers viewed as program weaknesses were as follows:

a. Scheduling of classes is a problem.

b. More students and more publicity about the program is needed.

c. Locating retail jobs in the downtown Tulsa area is difficult.

d. Some students are not prepared with the needed basic math and English skills necessary for jobs.

The cooperative vocational education teachers had the following recommendations:

a. Do a better job of recruiting students.

b. Institute a better public relations program, especially with employers.

c. Provide students more training in basic math and English skills.

d. Give students more guidance in the selection of a logical sequence of courses.

Objective #5 - To provide intensive skill training to those non-vocational students about to leave high school for a job.

According to a letter from Mr. Ruley to the Principal Investigator dated June 30, 1971, this objective "was not implemented" for a variety of reasons and hence no effort was made to evaluate this objective.

Objective #6 - To increase the students' understanding of and desire for additional training beyond high school where appropriate.

It was obvious that an effort was being made in this area with all students. Literature publicizing the post-secondary and adult vocational offerings available at the area vocational center were widely distributed. According to Mr. Ruley, a considerable number of the vocational students are also enrolling in the Tulsa Junior College which opened this year. Finally, a follow-up study of the class of 1967 indicated that 56% of the graduates of all Tulsa senior high schools enrolled in colleges or universities, and that an additional 6.9% participated in other types of full or part-time instruction.

Objective #7 - To inaugurate supplementary training programs such as summer training for job entry.

Summer cooperative training programs were offered in five of Tulsa's senior high schools but not in Central High School. Because of the time that this training took place (June and July) and because the program was not available in the exemplary program high school (Central), no attempt was made to evaluate the process or product of this program.

Objective #8 - To try alternative methods based on related research for using the facilities of the area school in an exemplary program.

An effort was made to make additional use of the area vocational center in connection with a summer career orientation and exploration program. During March, interested students were asked to select four program areas from a list of ten offerings. The program which was four weeks in length involved ten instructors and approximately 125 students who met daily between 8:30 A.M. and 12:00 noon.

No other alternative methods for use of the area school facilities have been tried.

General Findings

The authors of this report would be remiss if they did not report the high degree of enthusiasm and support for the program which was evidenced by nearly all the administrators and teachers involved in the program. The senior high and junior high vocational teachers as well as the elementary teacher sponsors who had regularly participated in the inservice training workshop indicated that they were part of a team dedicated to accomplishing what they believed to be very important goals.

SECTION V

RECOMMENDATIONS

Considering all the problems involved with late funding, the recruitment of new staff, and the initiation of a new comprehensive program, the progress made by the Tulsa administrators and teaching staff in connection with the exemplary program during the 1970-71 school year is very commendable. It is hoped by the evaluators that the recommendations which follow will be carefully considered by policymakers at all levels regarding the future operation and improvement of this program. The program, in the judgment of the evaluators, has many strengths as well as several components which need improving. Many specific recommendations are made obvious by a review of Section IV of this report, and are therefore, not repeated here.

On the basis of the findings of this evaluation effort, the authors of this report recommend that:

1. Funding of the program should be continued for another year.
2. The program be expanded gradually to include other schools and other students. Although the work being done with disadvantaged youth in this program is excellent and undoubtedly ranks a high priority, the evaluators feel that many students in addition to those classified as disadvantaged could benefit greatly from the program. If finances allow, it should be made available to all students who are interested.
3. A full-time program coordinator and the necessary support staff be employed as soon as possible to give strong leadership to the program. In spite of tremendous efforts on the part of the regular administrative staff, more time and resources must be given to overall coordination and planning of the program.
4. At least three vocational counselor coordinators be employed as soon as possible to assist the teachers and help coordinate the total career development program. The program objectives could be implemented more effectively and completely with the additional staff as originally specified. Ways to achieve closer cooperation between the regular counselors and teachers are also needed.

5. All objectives of the exemplary program be carefully reviewed by the total exemplary program staff to determine both their appropriateness, and to state them in more specific and measurable terms. This effort would help the teachers to better know where they are headed and would make future program evaluations easier.

6. More consideration be given to developing a better integrated program at all levels, K-12. Attention should be given to extending the program downward into the lower elementary grades so as to provide continuity in the career development program, from career awareness at the elementary level to career preparation at the senior high level. Better coordination and integration of efforts is especially needed at the 7th, 11th, and 12th grade levels. Teachers at those levels should be involved in all inservice training meetings and workshops.

7. Advisory committees be established to help plan and evaluate the program at all levels. Nearly all the teachers indicated this element was missing - but needed. Such committees would also provide an excellent way to involve more parents, employers, and employees in the program.

8. Some type of occupational interest clubs be established for students in grades 7-10. Most of the teachers at this level reported this activity as missing - but needed and such clubs would provide an excellent vehicle for helping with the many aspects of student self-development.

9. Participation in the exemplary program, in so far as is possible, should be voluntary and open to all students desiring it.

10. The intensive training component as called for in Objective #5 be implemented and combined with a strong commitment to place all participating students in either further schooling or employment.

11. An effort be made to schedule more of the elementary special interest club meetings during the regular school day. These teacher-sponsors should also be provided adequate preparation time and help in locating and contacting resource persons.

12. The "big brother" craftsman system be implemented and given a serious trial at the senior high level.

13. Effots to inform the entire professional staff and the Tulsa community about the exemplary program be continued and expanded.

14. Continued attention be given to conducting regular exemplary program staff meetings for purposes of coordinating efforts and inservice training of staff. The development of appropriate instructional materials during these meetings and the summer workshops should also be continued.

15. The independent evaluation agency and team members employed to conduct the second year and future evaluations, be contacted early in the fall so as to allow more time for planning and conducting all appropriate activities including the collection of pretest data.

APPENDIX A

Contents

Description of Exemplary Comprehensive Orientation Program
Guidelines for Operating World of Work Program, Grades 5-6
Career Orientation Program for Seventh Grade Students
Procedure and Policies for Operation of Exemplary Program

AN EXEMPLARY COMPREHENSIVE OCCUPATIONAL ORIENTATION VOCATIONAL EDUCATION PROGRAM IN THE TULSA PUBLIC SCHOOLS
In Cooperation With
THE STATE DEPARTMENT OF VOCATIONAL AND TECHNICAL EDUCATION

The Career Orientated Educational Program

There is a vital need to relate school and careers. Many students feel alienated from school due to the inability to understand how their educational program will help them to achieve job and career goals later in life. The acquisition of communicative skills becomes more meaningful when related to real life settings. The Tulsa Department of Vocational Education, in cooperation with the State Department of Vocational and Technical Education, through the implementation of some of the new facets of the Vocational Education Amendment of 1968, is committed to helping education at all grade levels become more career oriented. Exemplary efforts are being made during grades 5-12 to provide all students with the opportunity to gain a better understanding of the world of work and a desire to enter it. It has been found that even at early grade levels, the quality of educational achievement in communication is enhanced when coupled to real life situations related to work and the importance of a job in our society.

ELEMENTARY SCHOOL: Introduction to Occupations (World of Work) Grades 5-6

Programs designed for all children in grades 5-6 to provide a basic understanding of various occupations, to develop the attitude that all honest work is honorable, and to motivate a desire for participation in the world of work.

At the fifth and sixth grade level a method useful in occupational orientation can be copied from the successful 4-H Club practices. Special interest clubs will be formed in each elementary school with appropriate projects related to occupational information. These clubs will involve businessmen, craftsmen, advanced vocational students, classroom teachers and parents in sponsoring roles. Special interest clubs such as horticulture, electricity, wild life conservation, small engines, sewing, drafting and design, and health career clubs are types of clubs that could be organized under the leadership of teacher-sponsors and club coordinator for this activity working out a definite schedule for meetings, format for meetings, and selecting teacher-sponsors for these local clubs which will meet after school at least once each week.

"Life Career Game" is a technique useful in bringing youngsters to grips with decision-making necessary in the world of work. Barbula and Isaac (ED 016 268) indicate either poor results or insensitive instruments in their research. However, Boocock ("Life Career Game," Personnel and Guidance Journal, Vol. 46, pp. 328-334) and Shirts (ED 010 076) report satisfactory results with sixth grade students and with students at various grade levels.

The basic guide will be. "A Guide for Developmental Vocational Guidance, Grades K-12," Oklahoma State Department of Education, (1968). The success of the 4-H Club concept is well known. There is reasonable expectation that it will serve well in vocational areas, although it may not have been tried before. Vocational guidance curriculum materials developed by Abington School District, Pa. (ED 002 219) will be used in classroom activities to show students the processes through which career decisions may be made.

Gaming, through use of the Life Career Game, will be used to give students a real look into the planning, meeting obstacles, decision-making alternatives they will use in the future. ED 016 268 indicates use of the life career Game at the 6th grade level was not too successful in a San Diego project, however, additional studies reported by Boocock in "Life Career Game," Personnel and Guidance Journal, Volume 46, December, 1967, pp. 328-334, indicate more satisfactory results.

JUNIOR HIGH SCHOOL: Orientation and Exploration of Occupations - Grade 7

At the seventh grade level, all students should have an opportunity to learn about the jobs and careers available in the world of work. They should have an opportunity to be exposed to various careers so they will be able to decide if they are interested in exploring certain career clusters in more depth at a later time. The Career Orientation Programs are not aimed at decision-making but at providing all students with an opportunity to become exposed to as many different kinds of jobs and careers as possible over a one-year period as offered in seventh grade.

This is a program designed to provide all seventh grade students with an exposure to the jobs, careers, and professions in the world of work. It is a regularly-scheduled curriculum in industrial arts, homemaking, and business education, included at the seventh-grade level. All students gain a minimum of 180 hours of career orientation curriculum exposure in these practical arts subjects. The emphasis is upon student activity and use of resource persons so that students gain an understanding of all jobs and careers broken into large groups according to the Standard Industrial Classification. Career orientation curriculum units are taught by the teachers in the regular subject areas, namely, industrial arts, homemaking and business education. The program utilizes parents, business, industrial and professional persons in an advisory capacity.

JUNIOR HIGH SCHOOL: Career Exploration - 8-9 Grades

New and innovative programs designed to provide students in grades 8-9 with information and actual on-the-job experience in clusters of occupations have been initiated.

The Career Exploration Program at the 8th and 9th grade level, is a logical next step following career orientation in that it provides all students with an opportunity to explore in depth some job cluster areas: Construction, Manufacturing, Power, Transportation and Service Occupations, Business, Office, Clerical and Sales, Home and Community Services and Health Occupations. This exploration will provide youth with a more realistic understanding of careers and a better knowledge base upon which to project sound decisions concerning preparation for a job.

Following the career exploration at the 8th and 9th grade, students would then become selective. Some might select job preparation programs that could be offered through vocational education and cooperative vocational education programs. Others may prepare themselves for college and become prepared through the academic, baccalaureate degree route. Others may find that they need additional experience and an opportunity to become adjusted to jobs. These students could then select special needs vocational education programs.

SENIOR HIGH SCHOOL: Cluster and Skill Training - 10th Grade (Central High School

The skill training phase of the program is established at Central High School and will be under the direction of vocational education teachers. The program is designed and schools designated so that pupils will feed from elementary school to junior high school and into this high school program. This will mean that many students entering this program at the tenth grade level will have had the introductory and exploratory experiences described in the preceeding phases. This two semester, two periods per day program will be devoted to skill training in a cluster selected by the student as a result of his previous experiences in the program. At the outset, before the first feeder programs have been completed, most careful counseling will precede each student's selection of a cluster. (Construction occupations for boys, Home and Community Service occupations for girls.)

SENIOR HIGH SCHOOL: Exemplary Cooperative and Regular Vocational Program - Grades 10, 11, 12

After students have completed their cluster skill training at the tenth grade level they will either go into the regular vocational program in the local high school, the area vocational school or into the exemplary cooperative program. Many of these students who might not have succeeded in the regular program under normal conditions might now, because of their participation in these exemplary programs through grade 10, be ready to move into the mainstream of vocational students. One of the aims of this program will be to prepare students for success in traditional training programs or on the job. It is felt by the teacher that when the student is ready, he will shift into the traditional program.

SENIOR HIGH SCHOOL: Cooperative Vocational Programs - Grades 11, 12

These programs include Distributive Education, Diversified Cooperative Training, Cooperative Office Education, Agri-Business Cooperative, and Home Economics Job Training Cooperative. They are high skill in nature and include skill and technical-related instruction within the school coupled with job training plans and on-the-job supervision and coordination. In addition to these programs, many high skill programs include cooperative placement of students during their last semester prior to graduation and entrance to the world of work.

The exemplary cooperative program will be available for students who still may not be able to compete in a regular program. Built on the Cooperative Education concept but offering a wider variety of training opportunities, this semi-sheltered work experience program will provide closely supervised on-the-job experiences in a number of training areas. Managers and supervisors will be trained to understanding of the special problems of working with slower students. A "big brother" system in which a craftsman is encouraged to sponsor a trainee will be initiated. The coordinator of these programs will need to be sensitive to students' needs and employers' problems. The success of this phase will depend on the ability of the coordinators to convince businessmen to become a part of the training team for these most needy students.

SENIOR HIGH SCHOOL: Supplementary Training Programs - Grades 10- 12

A number of short term intensive training programs will be developed to supplement the four phases of the integrated vocational program. They will be directed to meet the needs of two populations: (1) Those who drop out of school without a salable skill, and (2) those who near graduation and have not been exposed to vocational training.

An intensive six-weeks skill training program may be offered at a high school, an area school, or skill training center during October and November for students who failed to enroll in school following the summer vacation. Students for these programs will be recruited through school records, local employment offices, and publicity from available news media--particularly through radio and television spot announcements. Programs to be offered will be based on student desires for training in critical skill areas where successful completion will lead to immediate employment. If there is a demand for them, a second series of programs will be offered in the spring for those who drop out during the school year.

A one-semester program may be offered to graduating seniors the second semester. This program will be only for those seniors who have not previously obtained vocational training. The program will incorporate the State-required English course into a full-time vocational program held six hours daily. It will combine skill training in special public school class with on-the-job training during the last nine weeks. The program will only be offered in areas of critical demand by business and industry. An additional two-month summer program will be offered to graduated seniors in July and August if a demand is warranted.

The attached chart describes the career development continuum. It will be noted that students are involved in the elementary education, world of work program integrated as a part of the 5-6 curriculum. It will also be noted that at the seventh grade, students will have the opportunity to observe jobs and careers broadly in regular practical arts courses.

This exemplary program has been developed so that it is as equally as applicable to students who may enter a career at the highest level, as well as those students who may enter semi-skilled jobs. Programs are designed so that no commitment is made at the elementary world of work or career orientation level, but rather that students as a part of their regular educational program, will become involved in career oriented activities so that they will see education as a part of the preparation for life and work, rather than apart from it. The career exploration facet is again for all students and is developed at a depth whereby students can explore and learn in detail about certain job cluster areas that they may have been exposed to earlier. The purpose of this facet of the career development continuum is to help youth gain the necessary experiences and understandings that will help them make a more accurate decision concerning their vocational goals. Their vocational goals may lead them toward enrollment in vocational education job preparation programs at the eleventh and twelfth grade level or it may direct them toward the vocational preparation programs offered at the college level. In all cases students progress through the career development continuum toward a job or career. In some cases youth would enter a job immediately upon graduation from high school. In other cases they might enter it upon graduation from a technical school or a college.

Approved: Dr. Bruce Howell
Assistant Superintendent
for Instruction

M. J. Ruley, Director
Vocational Education
Homer T. Towns, Assistant Director
Vocational Education
Frances W. Smith, Supervisor
Home and Family Living
Allie Dale Lambert, Supervisor
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George Wright, Coordinator
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Ralph Dressen, Coordinator
State Project

Exemplary Comprehensive
Occupational Orientation
Vocational Education Program
Tulsa Public Schools
Bulletin #2

GUIDELINES FOR OPERATING THE WORLD OF WORK PROGRAM IN ELEMENTARY EDUCATION: GRADES 5-6

Exemplary Program for Fiscal Year 1970-71
Department of Vocational Education

Need for and Purposes of the World of Work Education Program at the Elementary Level

Most students enrolled in present day elementary education programs have little opportunity to become acquainted with the world of work or to see any relationship between their classroom learning experiences and their future job or career.

The purpose of this program is to: (1) develop a respect for all work and (2) motivate all youth to want to participate in the world of work. Students should gain an awareness of the wide range of occupational opportunities available to them, a realization of how education helps to prepare for jobs and careers, and a feeling of respect for opportunities to earn a living. By incorporating into the elementary program procedures whereby each student will have exposure to and experiences with the world of work, he should gain a better understanding of work as a part of life, of its importance in our technological society, and of the wide spectrum of jobs and careers available.

Community involvement is essential to the program and can provide a secondary value to the World of Work Program - that of improved community-school relations.

Hopefully, this program will also contribute to improved academic education through increased student interest and motivation.

Program will provide for all students in grades 5 and 6.

The elementary program will incorporate a minimum of 40 hours per year of world of work oriented activities and experiences for children in grades 5 and 6.

The basic guide will be, "A Guide for Developmental Vocational Guidance, Grades K-12," Oklahoma State Department of Education, (1968). The success of the 4-H Club concept is well-known. There is reasonable expectation that it will serve well in vocational areas, although it may not have been tried before. Vocational guidance curriculum materials developed by Abington School District, Pa. (ED 022 219) will be used in classroom activities to show students the processes through which career decisions may be made.

Gaming, through use of the Life Career Game, will be used to give students a real look into the planning, meeting obstacles, decision-making alternatives they will use in the future. (ED 016 268) indicates use of the Life Career Game at the 6th grade level was not too successful in a San Diego project, however, additional studies reported by Boocock in "Life Career Game," Personnel and Guidance Journal, Volume 46, December, 1969, pp. 328-334, indicate more satisfactory results.

A local advisory committee is to be used in building the program. This committee should include representatives from the following groups: (1) Parents (2) Teachers (3) Administrators and (4) other community representatives.

Provisions will be made for inservice education of teachers.

Program evaluation procedures is to be developed as part of the program. The evaluation plan will provide for on-going as well as final end-of-year evaluation.

Special interest clubs built on the Extension Service concept will be the heart of this phase of the program. A Vocational Club Coordinator will be employed to plan and supervise the overall operation of the program. Clubs will be formed around the interest of 5th and 6th grade students in such areas as electronics, horticulture, cooking, drawing, etc. Special emphasis by the coordinator and sponsor will relate to career introduction and acceptance. Teacher-sponsors will be employed for after school work with students in the club program, along with volunteers, which includes businessmen or craftsmen whose work is closely related to the interest of the group; and a student or students in advanced training to the related occupation--with assistance of parents and teachers.

Approved: Dr. Bruce Howell
Assistant Superintendent
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Exemplary Comprehensive
Occupational Orientation
Vocational Education Program
Tulsa Public Schools
Bulletin No. 3

CAREER ORIENTATION PROGRAM FOR SEVENTH GRADE STUDENTS

Choosing a vocation is more difficult for today's young people than it has been for any other generation. There are thousands of different jobs and careers from which to choose. In the traditional programs of our educational institutions today, the student has no opportunity to get a personal acquaintance with more than one or two jobs, if indeed he has that opportunity. The child of today rarely has a first-hand opportunity to observe the industrial processes which produce the products of our society. These products and processes are the foundation of the wealth and technological development of our country. The rapid development of this technology, the increase of occupational specialization, the development of man's interdependence socially, economically, and vocationally has created a need for career guidance and exposure.

Our present educational programs provide little opportunity for students to gain a realistic understanding of various jobs and careers. Youth must have an opportunity to learn about our technological society. They need to learn about jobs and careers so that they have information necessary for establishing job goals in later years.

Junior high or middle school aged youth usually have a very sketchy idea of a few visible careers such as doctor, lawyer, or astronaut. Although they are bombarded by the mass media, their knowledge of jobs in terms of wages, working conditions and opportunity for advancement is limited. The early adolescent is interested in his future work. The role of work is a major portion of a person's life in our society. In a Career Orientation and Exploration Program, it is hoped that through an organized program of student-centered activities, the student will be exposed to a large range of jobs and careers. The Career Orientation concept is to introduce the middle school youth into the world of "working" occupations. The exposure of students to these occupations will broaden the student's knowledge of the world of occupations and present this relationship to his job goals.

A program of Career Orientation should be more than compartmentalization of Occupations. Compartmentalization thus far has always meant that occupations were taught by either a guidance counselor or the industrial arts teacher. Occasionally, when it seemed "appropriate", other disciplines would present career information when it could be related to the subject under discussion. In many of these instances only those "glamourous" occupations were given attention. Students were not actually exposed to jobs or to a group of jobs. In most cases, job exposure was minimal or only related to a few professional, industrial, or business careers. This particular method limited the broadening of the student's understanding of job goals. To reorient our educational system to the needs of youth in a technological society, our traditional program of education must be altered and become more relevant to the world of work. Our schools must offer an integrated program with the job and career goals of students as the central core.

The Career Orientation Program will present to students:

1. A more adequate knowledge of our technological society and jobs and career alternatives.
2. A knowledge of the economics necessary for participating in a technological society.
3. A knowledge of the kind of education or training required and work traits necessary in obtaining employment and gaining success in jobs and careers.
4. A self-appraisal regarding personal skills, abilities, and life aspirations.
5. An opportunity to develop attitudes toward the world of work which enables a person to fulfill his job career goal.
6. An opportunity to develop an attitude that socially useful work has dignity and worth and is necessary as a part of an integrated socio-economic system.

To make a job career choice from the widest range of occupational information, a program must permeate the student's entire schedule.

The practical arts teacher has a certain group of jobs and careers that they are responsible for teaching. This teaching includes extensive use of resource personnel and field trips, as well as the use of instructional materials, film strips, and other career oriented media. The first week of each semester will be devoted to lead in preparation which will include class discussion, study groups, projects, displays, orientation and jobs related to study areas. The second week will include parent involvement as resource persons in the professions such as: law, medicine, engineers, educators, business executives, business parents, industrial parents, and trade parents. Resource persons are to be invited into the schools from business, industry, and the services. They will come to the school and be a part of a planned session for the various classes. Field experiences are to be scheduled when possible to cover some of approximately 200 different jobs, careers, and professions. The planning of field trips and resource personnel are to be conveniently concentrated during the semester. In such an effort, close program coordination and organization is cardinal.

An effective Career Orientation Program requires an intensive planning process in order to develop an integrated program of occupational information and core materials. Many means of exposure to jobs and careers are possible through the seventh grade year. Examples of means of exposure are: Agriculture; Business;

Construction and Manufacturing; Distribution and Marketing; Services: 1. Personal 2. Repair; Transportation. Field trip experiences emphasize learning about the kinds of jobs and careers in work world. The students would have an opportunity to see and talk with workers. They would be involved in assignments that would cause them to gain an understanding of working conditions, opportunities for advancement, and other benefits of various jobs.

The organization of the Career Orientation Program includes intensive direction by the school principal, practical arts, vocational department and project coordinators. Leadership in helping the teaching staff to plan and develop curriculum is vital to its success. The local administrator involves the guidance department and others in planning the total curriculum. In the local planning process parent groups, as well as business and industrial representatives, are involved.

The Career Orientation Program is operated in the regular practical arts curriculum in cooperation with the total staff. One of the requirements is that a minimum of 180 hours of regularly scheduled career orientation curriculum activities be provided over a one-year period. This means that each seventh grade student, during their one year in this grade, would receive a minimum of 180 hours of career exposure. It also means that every seventh grade student would have an opportunity to learn about all jobs and careers regardless of whether they were going to be a skilled tradesman or a professional person. The objective is not that they would make a commitment in terms of selecting a career, but that they have an exposure to as wide a range of opportunities as possible, so that later they may be able to have a better base upon which to make a selection.

A vital component of program development is involvement of the total teaching staff in an inservice education activity. The schools that are approved for programs need to conduct teacher inservice workshops so that adequate time is available for reorganization for the curriculum and the development of the program. The local schools are encouraged to use their staffs and other community personnel in the development of materials. The resources of existing Vocational Education instructional materials laboratories will be made available in preparing materials. Vocational teacher educator services are available to school staffs as they conduct inservice education workshops.

REQUIREMENT FOR CURRICULUM PLANNING

For example, the teacher would arrange for a significant block of time devoted to the curriculum blocks in the seventh grade. At least 180 clock hours would be devoted to career orientation regularly scheduled over a one-year period of time. Provisions would be made for regularly schedule curriculum blocks that would include student activities and experiences related to understanding job opportunities in: Construction and Manufacturing, Business, Distribution and Marketing, Personal Home, Community, and Health Services, Power, Transportation and Service Occupations It is noted that the Standard Industrial Classification is to be broken into groups It is recommended that all levels of employment, i.e.: skilled, managerial, technical, and professional be included as a part of each group.

Emphasis should be placed upon using resource people from the community in agriculture, business and industry, as a means of helping students learn about career opportunities. Numerous field trips to observe jobs should be planned. The real world of work should serve as a part of the laboratory for orientation of careers.

Each of these suggested curriculum block areas should be scheduled so that the students would be in all areas sometime during the seventh grade year of the practical arts curriculum.

The career orientation curriculum blocks would be taught by teachers in existing curriculum areas of the practical arts. For example, industrial arts would handle construction and manufacturing, etc. -

NOTE: Vocational Education facilities and programs that are available, should be utilized in the orientation program. Industrial arts, social studies, science areas and others can offer curriculum blocks.

Approved: Dr. Bruce Howell,
Assistant Superintendent
for Instruction

TO: Instructors of CVET and Exemplary Special Vocational Programs

FROM: M. J. Ruley, Director Vocational and Technical Education

DATE: February 15, 1971

SUBJECT: Procedures and Policies for the Operation of Program Listed

1. The purpose of this program is career orientation and career exploration.

2. Classes to meet for ten (10) hours a week.

3. Activities are to be of the type that give the student insights into clusters of occupations and a study of hands on experiences in specific occupations.

4. Activities and experiences in the shop or laboratory are to relate to occupations being studied.

5. Activities performed shall not compete with work that is normally done by a private concern.

6. Materials for all outside jobs will be furnished either by the individual requesting the work, or by the school or department making the request.

   If the resale materials are used, charges will be retail prices plus 10%, with regular department receipts being written and funds deposited through the regular depositing procedure.

   If the department is not set up for resale accounting, arrangements will need to be made.

   If the school wishes to work through their activity funds to promote a project, this will follow the same procedure set forth by the school principal for handling activity funds.

7. No charges for general instructional supplies are to be made to students in the class.

8. Students wishing to keep items that may be constructed, manufactured, or repaired shall meet the same policy established in (6) above.

9. Items made by the class from materials supplies through the 100% funding may be used in and around the school.

10. With these general policies, the final selection of jobs is to be left to the discretion of the instructor, principal and vocational department.

11. Special cases to be handled prior to implementing the activity.

Approved: Dr. Bruce Howell
Assistant Superintendent
for Instruction

APPENDIX B

EVALUATION DATA COLLECTION INSTRUMENTS

Contents

Student Questionnaire #1 for 5th and 6th Graders
Student Questionnaire #2 for 5th and 6th Graders
Process Self-Evaluation Form for All Exemplary Teachers
Teacher Questionnaire for All Exemplary Teachers
Program Narrative Outline for All Exemplary Teachers
Teacher Questionnaire for Grade 7 Teachers
Student Questionnaire - Grade 10 Boys Only
Student Questionnaire - Grade 10 Girls Only
School Sentiment Index for Grade 10 Students
Teacher Questionnaire - Grades 11 and 12

STUDENT QUESTIONNAIRE #1

Directions:

A. Please list below the occupations that you have become acquainted with as a result of your participation in a special interest club.

B. Place a check ✓ mark after the occupations which you feel are important.

C. Where possible, give the name of a person you know who works in each of the occupations listed.

	A. OCCUPATION	B. CHECK	C. NAME OF WORKER
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15.			
16.			
17.			
18.			
19.			
20.			
21.			
22.			
23.			
24.			
25.			

STUDENT QUESTIONNAIRE #2

Directions:

A. List below the subjects you are now taking.

B. Place a check after those subjects which you feel will help you in your future job.

SUBJECT	CHECK	SUBJECT	CHECK
____________________	_____	______________________	_____
____________________	_____	______________________	_____
____________________	_____	______________________	_____

C. Given the list of jobs below, indicate the amount of education normally required for entering this type of occupation. In the first column, labelled EDUCATION, place an:

A after those jobs requiring less than 12 years of school,
B after those jobs requiring high school graduation,
C after those jobs requiring 4 years of college.

	OCCUPATION	EDUCATION	SALARY
1.	Truck driver	_________	______
2.	Engineer	_________	______
3.	Lab technician	_________	______
4.	Farm hand	_________	______
5.	Doctor	_________	______
6.	Laborer	_________	______
7.	Store manager	_________	______
8.	Lawyer	_________	______
9.	Salesman	_________	______
10.	Service station attendant	_________	______
11.	Teacher	_________	______
12.	Farmer	_________	______

D. In the above column labelled SALARY, indicate the amount of money you feel workers in each occupation make by writing:

LOW after those earning under $5,000 per year,
MEDIUM after those earning $5,000 to $10,000 per year,
HIGH after those earning over $10,000 per year.

E. EDUCATIONAL OFFERINGS OF SCHOOL

1. List below the educational programs and/or courses available to you at the junior high and senior high levels.

	Junior High Programs (Courses)	Senior High Programs (Courses)
a.	________________	________________
b.	________________	________________
c.	________________	________________
d.	________________	________________
e.	________________	________________
f.	________________	________________

2. Please list in Column A, the courses available to you in each grade, if any, that are designed to prepare you for some type of job.

	Column A Available Courses	Column B Type of Job
	________________	________________
	________________	________________
	________________	________________
9th Grade	________________	________________
	________________	________________
	________________	________________
	________________	________________
	________________	________________
	________________	________________
10th Grade	________________	________________
	________________	________________
	________________	________________
	________________	________________
	________________	________________
	________________	________________
11th Grade	________________	________________
	________________	________________
	________________	________________

	Column A Available Courses	Column B Type of Job
12th Grade		

3. In column B above and on page 2, list the type of job or jobs that each course is designed to prepare you for.

PROCESS SELF-EVALUATION FORM

1971

FOR

EXEMPLARY VOCATIONAL EDUCATION
AND ORIENTATION PROGRAM

____
(School)

________________________ (Signature) (Date)

SELF-EVALUATION OF THE EXEMPLARY PROGRAM

So that the practices and procedures you are using to implement the objectives of the Exemplary Program may be better understood and evaluated, the following information is needed.

Directions: Using the rating scale below, rate each evidence question so as to accurately describe the present use of these practices in your particular phase of the exemplary project. Then, considering all the evidence ratings for that section, determine the summary question rating.

Code	Rating Scale
5	Excellent - conditions or provisions are extensive and functioning well
4	Very Good - conditions or provisions are moderately extensive and functioning well
3	Good - conditions or provisions are average and functioning satisfactorily
2	Fair - conditions or provisions are limited and functioning unsatisfactorily
1	Poor - conditions or provisions are very limited and functioning poorly
M	Missing - but needed
N	Missing - but not needed

A. GENERAL PROGRAM

1. EVIDENCE:

_____ a. To what extent is a cumulative folder used for students?

_____ b. To what extent do you use the cumulative folder in understanding individual differences?

_____ c. To what extent is a record of various psychological test scores of each student available to you?

_____ d. To what extent are individual students performing as well as their record indicates they should?

_____ e. To what extent are you aware of students with special problems who should be referred to the guidance counselor?

SUMMARY

_______ To what extent is classroom instruction geared to meet the needs and differences of individual students?

2. EVIDENCE:

_____ a. To what extent may both boys and girls elect to participate in the exemplary program?

_____ b. To what extent may students of all ability levels freely elect to participate in the program?

SUMMARY

_______ To what extent may the exemplary program be freely elected by the students with whom you work?

3. EVIDENCE:

_____ a. To what extent are you familiar with the philosophy and the objectives of the school?

_____ b. To what extent are you familiar with the objectives of the exemplary program?

SUMMARY

_______ To what extent are the objectives of the exemplary program realistic in terms of the philosophy and objectives of the school?

4. EVIDENCE:

_____ a. To what extent do you use interest inventories?

_____ b. To what extent do you use aptitude tests?

_____ c. To what extent do you use achievement tests?

_____ d. To what extent do guidance counselors assist you in understanding individual differences?

SUMMARY

________ To what extent is meaningful instruction provided for relating individual student interests, aptitudes and abilities to occupations?

5. EVIDENCE:

_____ a. To what extent are students taught that people differ in their abilities and interests?

_____ b. To what extent are physical characteristics of individuals related to occupational opportunities?

_____ c. To what extent are abilities and aptitudes related to occupations?

_____ d. To what extent are various student interests related to appropriate kinds of occupations?

_____ e. To what extent are individual students helped to inventory their own characteristics, interests, aptitudes and abilities?

SUMMARY

________ To what extent are self-concepts presented in a meaningful and stimulating manner?

6. EVIDENCE:

_____ a. To what extent is the American economic system as a "free enterprise" system presented?

_____ b. To what extent is the concept of the circular flow of goods and services discussed?

_____ c. To what extent are the various forms of business organizations in a free enterprise system reviewed?

_____ d. To what extent have students studied money management principles and practices?

SUMMARY

________ To what extent do you relate economic activities and concepts to occupations and the world of work?

7. EVIDENCE:

_____ a. To what extent are changing occupational patterns discussed by the class?

_____ b. To what extent have occupations been classified by families or clusters?

_____ c. To what extent have trends and outlook opportunities in the local area, state and nation been presented?

_____ d. To what extent are the characteristics of work in each occupational area reviewed?

_____ e. To what extent do students identify and explore opportunities, specific requirements, and skills needed for success in occupations of interest of them?

SUMMARY

_______ To what extent are general orientation concepts presented regarding occupations?

8. EVIDENCE:

_____ a. To what extent are opportunities provided for students to become acquainted with all other vocational courses in the school?

_____ b. To what extent are opportunities provided for students to become acquainted with all general education courses in the school?

_____ c. To what extent are students allowed to visit other vocational classes within the school?

_____ d. To what extent are resource people and teachers of other vocational courses used to explain their offerings?

SUMMARY

_______ To what extent does participation in the exemplary program provide a basis for decision-making concerning the election of other vocational and general education courses in this school?

9. EVIDENCE:

_____ a. To what extent do students review their overall occupational interests and skills in relation to career opportunities?

_____ b. To what extent do you help your students plan for other school courses?

_____ c. To what extent do you present a complete picture of the post high school vocational and technical offerings of this geographical area?

_____ d. To what extent do you present a complete picture of the junior or senior college offerings of this geographical area?

SUMMARY

_______ To what extent do students have an opportunity to evaluate themselves and plan ahead?

10. EVIDENCE:

_____ a. To what extent have instructional objectives been clearly delineated for your phase of the program?

_____ b. To what extent do you plan your instruction in line with the objectives of this program?

_____ c. To what extent are the teaching objectives stated designed to meet the needs of this age group?

SUMMARY

_______ To what extent is instruction directed toward clearly formulated objectives that are appropriate for this age group?

11. EVIDENCE:

_____ a. To what extent do you use written lesson plans?

_____ b. To what extent are resource people scheduled in advance?

_____ c. To what extent are appropriate movies scheduled in advance?

_____ d. To what extent are field trips scheduled so that a minimum amount of inconvenience is experienced and a maximum amount of student learning takes place?

_____ e. To what extent are appropriate teaching materials obtained in advance?

SUMMARY

_______ To what extent is careful planning and the proper scheduling of applied activities followed?

12. EVIDENCE:

_____ a. To what extent do students participate in deciding on what field trips to take?

_____ b. To what extent do students participate in determining what occupations they will explore?

_____ c. To what extent do students participate in deciding what shop or laboratory activities they will experience?

_____ d. To what extent do students help select resource persons invited to speak with the class?

SUMMARY

_______ To what extent are students provided an opportunity to participate in planning their activities within the framework of established objectives?

13. EVIDENCE:

_____ a. To what extent does the administration encourage you to try new ideas?

_____ b. List new ideas you have tried this year.

____

____

____

SUMMARY

_______ To what extent are opportunities provided for a variety of experimental activities and other new approaches?

14. EVIDENCE:

_____ a. To what extent do you have a daily planning period free of students?

_____ b. To what extent do you have adequate time during the school day to contact resource people and arrange field trips?

SUMMARY

_______ To what extent are teachers allotted adequate time to prepare and coordinate instruction?

15. EVIDENCE:

_____ a. To what extent do you have a system for filing occupational materials?

_____ b. To what extent do you have an occupational library of materials separate from the school library?

_____ c. To what extent are materials easily accessible for student use?

SUMMARY

_______ To what extent is material for instruction organized appropriately?

16. To what extent do you use the techniques listed below to provide students with meaningful occupational orientation and/or exploration?

_____ a. Student reports

_____ b. Skits (including role playing)

_____ c. Occupational games

_____ d. Bulletin board activities

_____ e. Notebook work

_____ f. Committee work

_____ g. Window displays

_____ h. Brain storming (impromptu class discussion)

_____ i. Resource persons

_____ j. Field trips

_____ k. Films and filmstrips

_____ l. Student experience in vocational education

_____ m. Community surveys

_____ n. Use of mock corporation

_____ o. Use of mock union organization

_____ p. Other activities that are not mentioned above.

____

____

____

17. EVIDENCE:

_____ a. To what extent do individual students observe workers on the job in several occupational areas?

_____ b. To what extent do individual students have an opportunity to gain work experience in several occupational areas?

SUMMARY

________ To what extent does the program provide an opportunity for students to explore occupational opportunities in the wold of work?

18. EVIDENCE:

_____ a. Does the interest club have a teacher sponsor?

_____ b. Do businessmen and craftsmen assist with club activities?

_____ c. Do parents assist with club activities?

_____ d. Do other teachers assist with club activities?

_____ e. Does the club have regularly scheduled meetings? If so, how often are they scheduled? ________________

_____ f. Does the club meet at a time convenient for all students who wish to participate?

SUMMARY

_______ To what extent does a special occupational interest club exist?

B. FACILITIES AND INSTRUCTIONAL MATERIALS

19. EVIDENCE:

_____ a. To what extent are storage facilities available?

_____ b. To what extent are display facilities available?

_____ c. To what extent are filing cabinets available?

SUMMARY

_______ To what extent are storage and display facilities adequate for equipment and instructional materials?

20. EVIDENCE:

_____ a. To what extent do you have a definite plan for purchasing and replenishing material and equipment?

_____ b. To what extent is school purchased occupational teaching material available for classroom use?

_____ c. To what extent are provisions made to replenish expendable items?

_____ d. To what extent is free material reviewed, updated and replenished?

SUMMARY

_______ To what extent are provisions made for purchasing and replenishing material and equipment?

21. EVIDENCE:

_____ a. To what extent is instructional material attractive to the student?

_____ b. To what extent is instructional material written on the level of the students?

_____ c. To what extent do instructional materials include a variety of suggested student activities?

SUMMARY

________ To what extent is instructional material provided which contains information or suggestions for the stimulation of appropriate practical student activities?

C. COORDINATION AND PLANNING

22. EVIDENCE:

_____ a. Information on the occupational interests of students will be given to the students' succeeding teachers.

_____ b. Students will be advised to stay in the exemplary program as long as needed.

SUMMARY

_______ To what extent are plans being made to assure continuity and follow-up of interests developed by students participating in the program?

23. EVIDENCE:

_____ a. To what extent do you and the counselor confer concerning individual students?

_____ b. To what extent is time spent by the counselor in talks to your classes?

_____ c. To what extent are students referred to the guidance counselor?

_____ d. To what extent are materials shared by the guidance counselor and you?

SUMMARY

________ To what extent is there cooperation between the guidance counselor and the teacher concerning career planning?

24. EVIDENCE:

_____ a. To what extent are meetings of all exemplary teachers held?

_____ b. To what extent are meetings of all vocational teachers in the administrative unit held?

SUMMARY

_______ To what extent are meetings to coordinate efforts of all exemplary teachers regularly scheduled?

25. EVIDENCE:

_____ a. To what extent is time spent informing other teachers about the program?

_____ b. To what extent have inservice faculty meetings been devoted to discussion of the exemplary program?

______c. To what extent have printed materials been used to explain the program to teachers?

_____ d. To what extent is the professional advisory committee used to plan and coordinate the exemplary program?

SUMMARY

________ To what extent has the exemplary program in your school been explained to the other teachers and coordinated with other school programs?

26. EVIDENCE:

_____ a. Citizens' advisory committee meetings are held at least four times per year.

_____ b. Membership consists of employees, employers, and parents.

_____ c. The committee assists teachers in improving their program.

SUMMARY

________ To what extent does a citizens' advisory committee exist to help in planning and evaluating the exemplary program?

27. EVIDENCE:

_____ a. Opportunity is provided for all students to participate in individual conferences with their counselor.

_____ b. Sufficient time is allocated so that counseling sessions are frequent and in sufficient depth.

_____ c. Student - counselor ratios are satisfactory.

SUMMARY

________ To what extent is counseling interwoven into the exemplary program?

D. PROFESSIONAL GROWTH

28. Please list experiences you have selected for increasing your professional competencies as they relate to your role in the exemplary program. Estimate the time spent in these activities during the last year.

____

____

____

____

29. Please specify any inservice training which you feel would help you to be a more effective exemplary program teacher.

____

____

____

____

E. PUBLIC RELATIONS

30. EVIDENCE:

_____ a. To what extent is a planned orientation program for prospective students used?

_____ b. To what extent is a planned orientation program for parents of prospective students used?

SUMMARY

________ To what extent are efforts made to give prospective students a clear understanding of the purposes and nature of the program before they enroll?

31. EVIDENCE:

_____ a. To what extent have printed materials prepared by the school been used to inform the general public?

_____ b. To what extent have radio and television been used?

_____ c. To what extent have the printed news media been used?

SUMMARY

________ To what extent is a planned and coordinated public relations program implemented at the local level?

(The End)

School ______________________________

TEACHER QUESTIONNAIRE

A. List and briefly describe what you consider to be the five major strengths of this exemplary program.

B. List and briefly explain what you consider to be the five major needs or weaknesses of this exemplary program.

C. Please briefly outline recommendations that you feel would improve the exemplary program. Be as specific as possible.

School ________________________

Grade ________________________

PROGRAM NARRATIVE OUTLINE

So that an accurate description of your phase of the exemplary program may be obtained and included in the evaluation report, please outline in as much detail as possible, exactly what you and your students have done this year. Indicate the methods and procedures used in sufficient detail so that, should another teacher wish to implement your program in his classroom, he would have an excellent idea of how to begin from reading your description. Use the back and attach additional sheets if needed.

Name ______________________

Course ______________________

TEACHER QUESTIONNAIRE

GRADE 7

A. Did you provide all students in your seventh grade classes an opportunity to learn about jobs and careers available in the world of work? ____ Yes ____ No

If your answer to A was Yes, please complete the remaining questions.
If your answer to A was No, please return the questionnaire without going further.

B. Please check the following phrase or term which most appropriately describes what you were providing students this term concerning career orientation:

a. ____ career awareness
b. ____ career exploration
c. ____ cluster skill training
d. ____ intensive skill training
e. ____ occupational decision-making
f. ____ educational planning

C. Approximately how many of the 180 class days were devoted to the activity you checked in B above? ____________

D. To what extent have student activities been emphasized in your program? ____ extensively ____ some ____ very little

E. To what extent have resource persons been used to discuss jobs with your students? ____ extensively ____ some ____ very little

How many resource persons were used this year? ____________

Describe briefly the types of resource persons used (ie., position held, type of work, age, etc.)

____

____

____

____

____

F. What persons, if any, have been used in a program advisory capacity? ______________________________

____

G. On the back of this sheet, specify other teaching techniques, materials, etc. that you have used to help orient students to occupations.

STUDENT QUESTIONNAIRE

GRADE 10 BOYS

Directions:

A. Listed below are the cluster (occupational) areas and specific skills by area which were taught this year. Please indicate with a check (✓) the degree or level of ability which you feel you have attained for each skill. Your answers will be confidential (not seen by your teacher or principal). Please do NOT sign your name.

SKILLS	LEVEL WHICH YOU FEEL YOU HAVE ACHIEVED			
	Excellent	Good	Fair	Poor
MASONRY				
Ability to:				
a. identify tools and equipment	___	___	___	___
b. load and unload equipment and material	___	___	___	___
c. build forms	___	___	___	___
d. shovel cement, sand and gravel	___	___	___	___
e. screen sand	___	___	___	___
f. operate a wheel barrow	___	___	___	___
g. mix concrete	___	___	___	___
h. pour concrete	___	___	___	___
i. finish concrete	___	___	___	___
j. clean tools and equipment	___	___	___	___
k. sort tools	___	___	___	___
l. store tools and equipment	___	___	___	___
ELECTRICAL				
Ability to:				
a. identify and use tools and equipment safely	___	___	___	___
b. install wire	___	___	___	___
c. install switch boxes	___	___	___	___
d. install light boxes	___	___	___	___
e. wire a single pole toggle switch	___	___	___	___
f. wire a three-way toggle switch	___	___	___	___
g. wire a four-way toggle switch	___	___	___	___
h. apply solderless connections	___	___	___	___
i. tie a holding or underwriters knot	___	___	___	___

DRAFTING	Excellent	Good	Fair	Poor
Ability to:				
a. identify and use tools and equipment				
b. read a floor plan				
c. draw a floor plan				
d. draw a wall section				
e. draw an elevation				
CARPENTRY				
Ability to:				
a. identify and use tools and equipment safely				
b. measure building material				
c. build floor sills				
d. build floor joists				
e. lay floors				
f. lay out walls				
g. build walls				
h. build ceiling joists				
i. build truss				
j. deck roof				
k. lay shingles				
l. install siding				
HAND TOOLS (CARPENTRY)				
Ability to:				
a. use tools safely				
b. use marking tools				
c. use measuring tools				
d. use squares				
e. use saws				
f. use planes				
g. use striking tools				
h. use bits and drills				
i. use drilling tools				
j. use chisels				
k. use screwdrivers				
l. use wrenches				
m. use wrecking bars				
n. use levels				
POWER TOOLS (CARPENTRY)				
Ability to:				
a. use tools safely				
b. use the portable electric saw				
c. use the electric hand drill				

PAINTING AND FINISHING	Excellent	Good	Fair	Poor
Ability to:				
a. identify and use tools and equipment safely	____	____	____	____
b. measure and estimate	____	____	____	____
c. measure the length, width and height of a room	____	____	____	____
d. figure the square feet of a room	____	____	____	____
e. determine the amount of paint needed to paint an area	____	____	____	____
f. estimate the amount of labor needed to paint an area	____	____	____	____
g. construct and use a check list	____	____	____	____
h. prepare new interior and exterior woodwork for painting	____	____	____	____
i. prepare plastered walls for painting	____	____	____	____
j. prepare metal for cleaning	____	____	____	____
k. apply paint	____	____	____	____
l. apply stain	____	____	____	____
m. apply varnish	____	____	____	____
n. clean and store equipment	____	____	____	____
EMPLOYMENT				
Ability to:				
a. look for a job	____	____	____	____
b. fill out an application	____	____	____	____
c. interview for a job	____	____	____	____

B. Did you have an opportunity to select ONE or more occupational clusters for study this year? ____ Yes ____ No

C. If yes, did you receive careful counseling prior to making the selection of an occupational area? ____ Yes ____ No

D. If yes, do you feel now that your selection of an occupational cluster was appropriate? ____ Yes ____ No

E. If your answer to question D was no, what cluster or area would you prefer? ______________________________

STUDENT QUESTIONNAIRE

GRADE 10 GIRLS

Directions:

A. Listed below are the cluster (occupational) areas and specific skills by area which were taught this year. Please indicate with a check (✓) the degree or level of ability which you feel you have attained for each skill. Your answers will be confidential (not seen by your teacher or principal). Please do NOT sign your name.

SKILLS	LEVEL WHICH YOU FEEL YOU HAVE ATTAINED			
	Excellent	Good	Fair	Poor
CAREER EXPLORATION				
Ability to:				
a. obtain a Social Security card				
b. figure hourly, weekly or monthly pay				
c. make a budget				
d. open and use bank accounts				
e. have good work habits and attitudes				
f. fill out applications and job information sheets				
HEALTH SERVICES				
Ability to:				
a. find jobs in health services				
b. locate those jobs				
c. apply for a job				
HOME NURSING				
Ability to:				
a. keep a home sanitary				
b. make a bed				
c. take a temperature				
d. plan diet for patients				
e. take care of children				
CHILD CARE				
Ability to:				
a. discipline children				
b. understand children's behavior				
c. plan creative activities				

	Excellent	Good	Fair	Poor
FOOD SERVICES				
Ability to:				
a. buy and store foods	____	____	____	____
b. prepare and serve foods	____	____	____	____
c. have good manners	____	____	____	____
d. follow safety rules	____	____	____	____
e. be sanitary in preparing and serving foods	____	____	____	____
PERSONAL DEVELOPMENT				
Ability to:				
a. choose a vocation	____	____	____	____
b. select and care for proper work clothing	____	____	____	____
c. take proper care of the hair	____	____	____	____
d. take proper care of the skin	____	____	____	____
e. use make-up properly	____	____	____	____
f. have a pleasing personality	____	____	____	____
SEWING SERVICES				
Ability to:				
a. make alterations	____	____	____	____
b. mend	____	____	____	____
c. operate a sewing machine	____	____	____	____
d. use attachments	____	____	____	____
e. oil and clean a sewing machine	____	____	____	____
f. select fabric, trim and thread	____	____	____	____
g. select patterns and follow directions	____	____	____	____
h. cut out, sew and properly finish a garment	____	____	____	____

B. Did you have an opportunity to select ONE or more occupational clusters for study this year? ____ Yes ____ No

C. If yes, did you receive careful counseling prior to making the selection of an occupational area? ____ Yes ____ No

D. If yes, do you feel now that your selection of an occupational cluster was appropriate? ____ Yes ____ No

E. If your answer to question D was no, what cluster or area would you prefer? ______________________________

SCHOOL SENTIMENT INDEX

Secondary Level

Directions: For each statement, indicate the extent to which you agree or disagree by marking the answer sheet:

A) if you strongly agree

B) if you agree

C) if you disagree

D) if you strongly disagree

For example:

I. My classes are too easy.

If you disagree with the statement you should mark C on the answer sheet as follows:

```
     A   B   C   D
I.  ( ) ( ) (X) ( )
```

There are no right or wrong answers, so respond to each item as honestly as you can. Do not write your name on your answer sheet.

---

1. I do my best in school.
2. Each morning I look forward to coming to school.
3. My school has too many rules.
4. I often feel rushed and nervous at school.
5. Students here aren't very friendly.
6. I hate having to do homework.
7. When I'm at school, I'm usually unhappy.
8. This school is run like a prison.
9. If I did something wrong at school, I know I would get a second chance.

10. I enjoy working on class projects with other students.

11. I would rather learn a new sport than play one I already know.

12. School depresses me.

13. Whenever I'm called to one of the offices at school, I feel upset.

14. I think there is too much pressure at school.

15. School is a good place for making friends.

16. I like the challenge of a difficult assignment.

17. I stay home from school whenever I can.

18. My classes are too big.

19. I'm very interested in what goes on at this school.

20. The main reason for going to school is to learn.

21. If I had a serious problem, I don't know one teacher in my school I could go to.

22. Students have enough voice in determining how this school is run.

23. I usually don't get involved in many school activities.

24. I really like most of the kids at this school.

25. I attend many school events.

26. I really feel I'm part of my school.

27. It is difficult for a new student to find friends here.

28. My favorite classes are those in which I learn the most.

29. I would like to go to school all year long.

30. Each September I look forward to the beginning of school.

31. Our school is so large, I often feel lost in the crowd.

32. I try to do good work in my class.

33. I like school better than my friends do.

34. There's no privacy in school.

35. I enjoy the social life here.

36. There are many closed groups of students here.

37. I often buy books with my own money.

38. I liked school better when I was in elementary school than I do now.

39. At school, other people really care about me.

40. If I thought I could win, I'd like to run for an elected student body office.

41. I do more school work than just what is assigned.

42. Lunch time at school is not fun.

43. If I had the choice, I wouldn't go to school at all.

44. I follow the school rules.

---

* This form adapted from a test prepared by Instructional Objectives Exchange, Los Angeles, California

SCHOOL SENTIMENT INDEX

Answer Sheet

	A	B	C	D		A	B	C	D		A	B	C	D
1.	( )	( )	( )	( )	18.	( )	( )	( )	( )	35.	( )	( )	( )	( )
2.	( )	( )	( )	( )	19.	( )	( )	( )	( )	36.	( )	( )	( )	( )
3.	( )	( )	( )	( )	20.	( )	( )	( )	( )	37.	( )	( )	( )	( )
4.	( )	( )	( )	( )	21.	( )	( )	( )	( )	38.	( )	( )	( )	( )
5.	( )	( )	( )	( )	22.	( )	( )	( )	( )	39.	( )	( )	( )	( )
6.	( )	( )	( )	( )	23.	( )	( )	( )	( )	40.	( )	( )	( )	( )
7.	( )	( )	( )	( )	24.	( )	( )	( )	( )	41.	( )	( )	( )	( )
8.	( )	( )	( )	( )	25.	( )	( )	( )	( )	42.	( )	( )	( )	( )
9.	( )	( )	( )	( )	26.	( )	( )	( )	( )	43.	( )	( )	( )	( )
10.	( )	( )	( )	( )	27.	( )	( )	( )	( )	44.	( )	( )	( )	( )
11.	( )	( )	( )	( )	28.	( )	( )	( )	( )					
12.	( )	( )	( )	( )	29.	( )	( )	( )	( )					
13.	( )	( )	( )	( )	30.	( )	( )	( )	( )					
14.	( )	( )	( )	( )	31.	( )	( )	( )	( )					
15.	( )	( )	( )	( )	32.	( )	( )	( )	( )					
16.	( )	( )	( )	( )	33.	( )	( )	( )	( )					
17.	( )	( )	( )	( )	34.	( )	( )	( )	( )					

A = Strongly Agree
B = Agree
C = Disagree
D = Strongly Disagree

School ____________________

Teacher ____________________

TEACHER QUESTIONNAIRE

Grades 11 and 12

A. Did you institute cooperative on-the-job training in a cluster of occupations? ____ Yes ____ No

B. If yes, in what year was the training initiated? ____________

C. If yes, how many students were enrolled this school year? ______

D. If yes, please list the occupational cluster areas in which your students participated in cooperative on-the-job training?

Occupational Cluster Areas	No. Students Who Enrolled	No. Students Who Completed
____________________	__________	__________
____________________	__________	__________
____________________	__________	__________
____________________	__________	__________
____________________	__________	__________
____________________	__________	__________
____________________	__________	__________
____________________	__________	__________

E. How many of your cooperative on-the-job students are being sponsored by a "big brother" craftsman or tradesman? ______

F. If your students are participating in the "big brother" program, please list below what you consider to be the strengths and weaknesses of this program feature.

Strengths	Weaknesses
____________________	____________________
____________________	____________________
____________________	____________________
____________________	____________________
____________________	____________________
____________________	____________________

G. Are you intensifying skill training and increasing job readiness by providing training in a cluster of occupations? ____ Yes ____ No

H. If yes, please explain in detail how you are accomplishing this objective.

APPENDIX C

SUMMARY OF EVALUATION INSTRUMENTS ADMINISTERED BY GROUP AND GRADE LEVEL

GRADE LEVEL	GROUP Students	 Teachers
5 & 6	1. Student Questionnaire #1 2. Student Questionnaire #2	1. Process Self-Evaluation Form 2. Teacher Questionnaire 3. Program Narrative Outline
7	1. None	1. Same as for 5th and 6th grade teachers plus 2. Teacher Questionnaire - Grade 7
8 & 9	1. Ohio Vocational Interest Survey - (Also administered to a control group	1. Same as for 5th and 6th grade teachers
10	1. Student Questionnaire - Boys 2. Student Questionnaire - Girls 3. School Sentiment Index - (Also administered to a control group)	1. Same as for 5th and 6th grade teachers
11 & 12	1. None	1. Same as for 5th and 6th grade teachers plus 2. Teacher Questionnaire - Grades 11 & 12

Explanation of Specific Use of Each Evaluation Instrument

A. Student Questionnaire #1- Was used to collect specific information regarding program objective #1 from fifth and sixth grade students.

B. Student Questionnaire #2 - Was used for the same purpose as Student Questionnaire #1 but administered separately so that information on #2 could not be used to answer questions on form #1.

C. Teacher Questionnaire - Grade 7 - Was used only with seventh grade teachers to determine changes made in their regular practical arts program to accomplish the requirements specified in program objective #2.

D. Ohio Vocational Interest Survey (OVIS) - Was used in the eighth and ninth grade along with a control group (so as to allow comparisons) to determine how reasonable (program objective #2) their occupational and training choices were. Tested interests Part II of OVIS were cross-checked.with stated interests and educational plans.

E. School Sentiment Index - Was used in the tenth grade along with a control group to partially assess progress being made toward meeting program objective #3.

F. Student Questionnaire - Grade 10 Boys - Was used to partially assess progress toward meeting program objective #3.

G. Student Questionnaire - Grade 10 Girls - Same as above except for female students.

H. Teacher Questionnaire - Grades 11 & 12 - Was used to determine the effort being made to implement cooperative on-the-job training experiences in a cluster of occupations (objective #4).

I. Teacher Questionnaire - Was administered to most teachers to obtain their subjective, open-ended opinions about the exemplary program strengths and weaknesses.

J. Program Narrative Outline - Was completed by most teachers involved in the program and used in preparation of the evaluation report to help describe as accurately as possible exactly what was done.

K. Process Self-Evaluation Form - Was completed by most exemplary program teachers and their immediate supervisors and used to assess in the usual manner the ways and means being used to implement the exemplary program.

APPENDIX D

GRADES 5 & 6

Planning and preparation for all work should be directed toward the recognition that every child will be a contributing member to a world of challenging change.

Objectives

I. Develop a positive concept of self.

II. Develop varied and wide interests.

III. Develop ability to make wise decisions and choices.

IV. Have opportunities to express and develop goals and aspirations.

V. Acquire necessary skills basic to living a full and meaningful life.

VI. Acquire skills necessary to fully contribute to or participate in the world of work commensurate with abilities and interests.

VII. Learn about and discuss job opportunities not only in the community but on an international and national basis.

VIII. Learn the kinds of skills and the extent of education and preparation necessary to qualify or enter certain job areas.

IX. Have many opportunities to express interests, exercise talents and explore areas in which to develop other interests and talents.

X. Learn to value the dignity and importance of all types of work and skills.

XI. Learn that all workers contribute to the positive over-all welfare of our society.

XII. Develop a positive attitude toward work and preparation for work.